SURVEYING
+ CONSTRUCTION
INSTRUMENTS

CODY

Decision Guide

CODY 2015 January

Working Inside?

Carpenter

RED BEAM

Bear Servo360	p.24
Bear PolarHV	p.16
Spectra LP30/50	p.31
Spectra 1.3/5.2XL	p.30
Spectra HV301	p. 7

GREEN BEAM

Bear Servo360G	p.29
Bear LL6MiniG	p.29
Bear Polar HVG	p.17
Spectra HV301G	p. 8

MEASURING TOOLS

Digital Levels	p. 39
Laser Measurers	p. 40+

Builder

RED BEAM

Bear Servo360	p.24
Bear PolarHV	p.16
Spectra LP30/50	p.31
Spectra 1.3/5.2XL	p.30
Spectra HV301	p. 7

GREEN BEAM

Bear Servo360G	p.29
Bear Polar HVG	p.17
Spectra HV301G	p. 8

MEASURING TOOLS

Digital Levels	p.39
Laser Measurers	p.40+

Tiler

RED BEAM

Bear LL3X	p.28
Bear LL6Mini	p.29
Spectra 1.3/5.2XL	p.30

GREEN BEAM

Bear LL6MiniG	p.29

MEASURING TOOLS

Digital Levels	p. 39
Moisture Meter	p.44,45

Working Outside?

Fencing Contractor

LONG RANGE

Proshot L4.7M	p. 1

Concretor

Grade

MANUAL GRADE

Proshot Alpha	p. 2
Spectra LL300	p. 6

DIAL-IN GRADE

Proshot AS2	p. 3
Spectra GL412	p. 9
Spectra GL612	p. 10

Level Only

CLOSE RANGE

Proshot L4.7	p. 1
Proshot Alpha	p. 2
Spectra LL500	p. 5

LONG RANGE

Proshot L4.7M	p. 1
Proshot Alpha XD	p. 2

Plumber

GRADE LASER

Proshot Alpha	p. 1
Proshot AS2	p. 3
Spectra LL300	p. 6

PIPE LASER

AMA SLP	p. 27
Spectra UL633	p. 11

MEASURING TOOLS

Digital Levels	p. 39

Earthmover

Grade

MANUAL GRADE

Proshot Alpha	p. 2
Spectra LL300	p. 6

SINGLE DIAL IN GRADE

Proshot AS2	p. 3
Spectra GL412	p. 9

DUAL DIAL IN GRADE

Spectra GL422	p. 9
Spectra GL622	p. 10

Civil

LONG RANGE LEVEL

Proshot Alpha XD	p. 2
Proshot L4.7 Mag	p. 1
Spectra HV301	p. 7

SINGLE DIAL IN GRADE

Proshot AS2M	p. 3
Spectra GL612	p. 10
Spectra GL710	p.14

DUAL DIAL IN GRADE

Spectra GL622	p. 10
Spectra UL633	p. 11
Spectra GL720	p.14

PIPE LASERS

AMA SLP	p.27
Spectra DG711	p.28
Spectra UL633	p.11

CONE LASER

Alpha C	p. 4

Laser Receivers

Line Laser

Bear LLR
Spectra HR220

Handheld

Proshot R7
Proshot R8
Apache Thunder
Apache Lightning
Spectra HR150U
Spectra CR600
Latec CR5

Digital

Apache Storm
Spectra HR450
Spectra HL700
Spectra HL750
Spectra DR400

Machine

SKIDSTEER / BOBCAT

MCE R.45
Latec CR5
Spectra CR600
Apache BE3+

DOZER / GRADER

MCE R.45.TC
Apache BE5+

EXCAVATOR / BACKHOE

MCE R.45.TC
MCE R.45
Spectra LR20
Apache BE6

Decision Guide

Answer these questions to help you choose the proper construction laser...

Will the laser level be used indoors, outdoors, or both?

To use the laser visually for interior construction, choose a level tool with a highly visible beam, either ~635nm red laser or ~530nm green laser. ou will need a laser level detector for outdoor work, as even a highly visible green laser will be lost in daylight. Laser construction levels designed for interior work will also feature variable rotation speed or beam scanning to maximize visibility.

Can the laser level be disturbed by laborers, live traffic, or heavy equipment?

If you work on large, busy sites, self leveling is an absolute must. A self leveling construction laser corrects for slight disturbances from wind or vibration, and will shut off for greater disturbances. Manually leveled lasers must be periodically checked and re-leveled to assure accurate results. This is fine for small, well controlled sites such as house foundations, or deck and landscaping work. Self leveling lasers are a must for larger jobs and commercial buildings. Self leveling is achieved by either a servo motor system or a compensator, both which can provide similar accuracy. If you are placing the laser level on a 3 metre tripod for machine control work, or up on wall angle for suspended ceiling installation, a servo leveled laser is handy because it does not have to be rough leveled. Compensator leveling systems have to be roughed-in before they can self level and are simpler electronically.

How much accuracy do you need in your construction laser level?

Rotary construction laser accuracy starts on the low end at about +/- 6mm per 30m for inexpensive manually leveled products, and increases to as fine as ±7 arc sec (1mm per 30m) for self leveling lasers. Error increases with distance from the laser transmitter. If a laser's accuracy is ±1mm at 30m, it is ± 2mm at 60m and ± 4mm at 120m. The best accuracy comes from working as close as possible to the laser level.

Do you need a laser level tool that can also project a slope?

Construction lasers for precision slope (storm sewers or airport runways) have mechanical or digital counters that enable entry of slope in increments of .01% or better. For less precise applications such as drainage ditches and drive ways there are self-leveling lasers capable of manual "slope matching".

Do you need additional features, such as vertical alignment, or 90º layout?

If you need to perform layout and alignment tasks that go beyond the basic level tools, there are a variety of features available. There are laser construction level tools capable of projecting a vertical plane of laser light for layout, or plumb alignment. Laser level tools are great for taking base lines or layout points and transferring them to a ceiling, or upper floor. There are models with a plumb laser spot that forms a 90º reference to the plane of laser light. That 90º reference can be used for square layout, or to transfer single points up and dead vertical. This is really handy on a windy high-rise job and for special needs like elevator shaft control points.

Frequently asked questions:

The L4.7 construction lasers is described as self leveling or automatic. How come I have to turn leveling screws?

These construction laser models self level via wire hung compensators. These are gravity pendulum leveling mechanisms that must be rough leveled. Once the instrument is in its self leveling range, the compensator makes sure that the beam is level. The term "automatic" derives from automatic optical levels which employ compensators for self leveling. These auto levels also have to be rough leveled. Servo motor leveling systems have a wider self leveling range and allow the user to turn the laser on without having to turn leveling screws.

Which self leveling system is better, servo motor or compensated?

Each system has its pluses and minuses. Servo systems have the appeal of driving the laser to level without the operator turning leveling screws. However, a compensated self leveling laser can be up and running just as fast as a servo system. Well designed servo systems and compensated systems both provide accurate and reliable results. For grade checking and concrete work, compensated systems have been the mainstay for many years as they provide better temperature and vibration compensation than all but the most expensive servo systems. If the laser is going to be used in a situation where it is inconvenient to turn leveling screws, (up on a 3-4 metre tripod for machine control), a servo system would be preferable.

Can I use a visible construction laser outdoors without a receiver?

A rotary laser will have to be used with a receiver outdoors in the sun. Safety regulations do not permit a beam powerful enough to be visible when rotating out in sunlight. If you stop the rotating beam and shine it onto a shaded target, you can use it as a reference, but this is not that convenient.

How often should my laser be calibrated?

Lasers should be calibrated when they are not shooting their specified accuracy. We suggest checking calibration regularly, at least every 6 months, or immediately if the unit has been treated roughly.

Can I set a grade or slope into the laser?

You can set a precise slope with the Proshot AS2 and Spectra GL/UL series lasers . You can "slope match" between existing elevations with any of the Proshot Alpha, Spectra LL300 and Bear Polar HV model lasers.

What kind of tripod do I need for my laser?

Most if not all modern lasers fit tripods with a 5/8 x 11 coarse thread. Dome or flat head tripods can be used. A flat head tripod will work with most lasers whilst a dome head tripod allows lasers like the the L4.7 and L4.7 Magnum to be levelled without using the levelling screws simply by sliding the laser over the domed head. Due to their temperature stability, wooden and composite (fibreglass) tripods should be used for distances over 200 metres. Aluminium tripods have a tendency to move in the heat.

PRO SHOT LASER · BEAR SCIENTIFIC · SPECTRA PRECISION LASER · TROTEC · Apache Tools · Nikon

Looking at buying more than 1? Contact us for a quantity price today!

Where can I get my construction laser serviced?

Almost any laser or survey instrument service center can calibrate our lasers, or the user can do so if he/she so desires. Many of our dealers in Australia have some service capabilities ranging from simple calibration to full break down and repair.

Can the laser light hurt my eyes?

The maximum power output for any construction laser is less than 5 milliwatts. A milliwatt is one thousandth of a watt. No special precautions need be taken with a class 1 laser such as the Alpha 1. Class II and class III Visible beam lasers should be set so they are not flashing in anyone's eyes because the light is very bright and can be annoying. Having the beam flash in one's eyes occasionally will not do any damage, but will be irritating in the same fashion as a camera flash. Local regulations need to be considered when operating any laser, many strict requirements need to be adhered to for Class II and Class III lasers especially, including but not limited to: training certificates and high visiblity signage.

Can your construction lasers be used for turning angles?

Our visible beam L4.7 Magnum, Spectra HV301 and Polar HV lasers have fixed plumb spots that provide a 90 degree reference laser beam relative to the rotating beam when the laser is in its vertical mode. This is only easily used indoors out of the sun. The Bear Servo360 and Spectra 1.3XL line lasers provides the same functionality as above but with ability to pick up the 90 degree reference using a receiver up 30 metres away in sunlight. For accurate angles outside of this range an optical instrument such as the Nikon AS-2C or Bear Theodolite is the best choice.

Can I use a laser receiver to pick up the plumb spot?

Most laser receivers are looking for a laser spot flashing across their photocells and will not respond to a stationary laser spot. The Spectra Precision UL633 is the only laser system on the market that is capable of picking up a stationary spot. Using a special receiver the dot can be detected up to 80m away.

What happens if my construction laser is rained on?

Pro Shot and Spectra Precision lasers are water and dust resistant. Simply dry the laser off before it is stored.

I'm a rural fencing contracator, what is the maximum distance i can shoot with a rotary laser?

The maximum distance obtainable by a rotary laser is determined by three things: The output power and quailty of the laser diode, the receiver sensitivity, and the ambient light levels. Currently, the best combination of equipment that we have available is the Proshot L4.7 Magnum with an Apache Storm receiver set to high sensitivity. This combo provides a minimum 700 metre radius during the day. As the ambient light drops, the range increases to 900+ metres at around 6:00pm. A point to consider is that at these longer distances alignment becomes increasingly difficult using conventional methods. The addition of a spotting scope and auxillary display system for the aforementioned Proshot L4.7 Magnum kit allows one person alignment at long range.

Proshot L4.7 High Accuracy Automatically Compensated Laser

Unmatched in accuracy and warranty the L4.7 is our best selling laser. Over many years of heavy use in the field it has proven itself to be the reliable choice for the concreting, commercial building and earthmoving industries. No other laser gives as much value, functionality and accuracy as the Proshot L4.7.

- Horizontal Automatic Self-Levelling, Manual Vertical Levelling
- Provides better stability in high vibration enivroments than any other laser
- Unmatched Temperature Stabilty beats Servo units hands down
- 110 Hours of operation on a single set of batteries

SPECIFICATIONS

WORKING RANGE	460m+ Diameter (Receiver Dependent)
ACCURACY	1mm @ 30m
LEVELLING TYPE	Precision Compensator
BATTERIES	4 x C cells
OPERATING TIME	110 Hrs (Alkaline) 70 hrs (Recharge Kit)
ROTATION SPEED	600rpm
ENVIRONMENTAL	Water & dust proof IP55
OPERATING TEMP	-20° to 50°C
SLOPE CAPABILITY	Dual Axis Manual Slope Matching
WARRANTY	5 Year Warranty

Proshot L4.7 Magnum Long Range Horizontal/Vertical Laser

The Pro-Shot L4.7 Magnum is designed for both interior and exterior use. It boasts all the features and benefits of the L4.7 plus incorporates a highly visible beam for interior fit-outs & ceiling work. The extended working range coupled with the ability to be used in vertical mode also makes this laser the perfect choice for long-range exterior applications such as rural fencing. A built-in automatic plumb beam adds the ability to transfer points from floor to ceiling and can be used for squaring when the unit is used in vertical mode.

- Horizontal Automatic Self-Levelling, Manual Vertical Levelling
- Long Range Class III Bright Visible Beam
- Transfer Plumb Points, Squaring, Adjustable Rotation Speed
- Manual Beam Pointing, Levelling Limit Indicator, Low Battery Indicator
- W1 Vertical / Wall Mount Included
- Unit pictured with optional scope for long range alignment tasks eg. Rural Fencing

SPECIFICATIONS

WORKING RANGE	1400m+ Diameter (Receiver Dependent)
ACCURACY	1mm @ 30m
LEVELLING TYPE	Precision Compensator
BATTERIES	4 x C cells
OPERATING TIME	60 Hrs (Alkaline) 40 hrs (Recharge Kit)
ROTATION SPEED	0 to 500rpm (Variable)
ENVIRONMENTAL	Water & dust proof IP55
OPERATING TEMP	-20° to 50°C
SLOPE CAPABILITY	Dual Axis Manual Slope Matching
WARRANTY	5 Year Warranty

Proshot ALPHA XD Long Range Fully Automatic Horizontal Laser

The Proshot Alpha by Laser Reference is the best laser available for commercial sites, concretors & earthmovers. Long range, manual grading and one button operation make it invaluable on a busy site.

- **Horizontal Fully Automatic Self-Levelling, Manual Grade / Slope Matching (Single Axis)**
- **600 & 1200rpm Selectable Rotation Speed, Anti-Drift Height Alert Indicator**
- **100 Hour Operatiing Time on a single set of batteries**
- **Includes both Alkaline batteries and NiMH Recharge kit with Smart Charger**
- **5 years Knock Down No Cost Warranty**

SPECIFICATIONS

WORKING RANGE	1200m+ Diameter (Receiver Dependent)
ACCURACY	1.5mm @ 30m
LEVELLING TYPE	Servo Motor 5 Degrees
BATTERIES	4 x C cells
OPERATING TIME	100 Hrs (Alkaline) 65 hrs (NiMH Recharge)
ROTATION SPEED	600rpm or 1200rpm (Machine Control Mode)
ENVIRONMENTAL	Water & dust proof IP56
OPERATING TEMP	-10° to 50°C
SLOPE CAPABILITY	Single Axis Manual Slope Matching 10%
WARRANTY	5 Year Knock Down Warranty

Alpha XD Bundles

Proshot ALPHA 1 Site Safe Fully Automatic Class One Laser

Announcing the new Proshot Alpha 1 rotating laser from Laser Reference. This new product offers all of the features of the original Alpha but with the convenience of CLASS I laser specification, allowing hassle free operation on today's "laser safe" construction sites.

- **Class I Laser Classification, alleviating the hassle and cost of certification on todays strict sites**
- **Horizontal Fully Automatic Self-Levelling, Manual Grade / Slope Matching (Single Axis)**
- **600 & 1200rpm Selectable Rotation Speed, Anti-Drift Height Alert Indicator**
- **Includes both Alkaline batteries and NiMH Recharge kit with Smart Charger**
- **5 years Knock Down No Cost Warranty**

SPECIFICATIONS

WORKING RANGE	600m+ Diameter (Receiver Dependent)
ACCURACY	1.5mm @ 30m
LEVELLING TYPE	Servo Motor 5 Degrees
BATTERIES	4 x C cells
OPERATING TIME	120 Hrs (Alkaline) 75 hrs (NiMH Recharge)
ROTATION SPEED	600rpm or 1200rpm (Machine Control Mode)
ENVIRONMENTAL	Water & dust proof IP56
OPERATING TEMP	-10° to 50°C
SLOPE CAPABILITY	Single Axis Manual Slope Matching 10%
WARRANTY	5 Year Knock Down Warranty

CLASS 1 LASER PRODUCT

Alpha 1 Bundles

Proshot AS2 Fully Automatic Single Grade Laser

The Pro-Shot AS2 brings unmatched value to grading, excavating, sewer line & drainage contractors.

- **Horizontal Fully Automatic Self-Levelling**
- **Dial-In Grade up to 25% in 0.01% increments**
- **Exceptional Operating Time - 115hrs on one set of Batteries!**
- **Anti-Drift Height Alert and Low Battery Indicator**
- **Dual Grade Adapter Available**
- **Lifetime Warranty - 5 years No Cost**

SPECIFICATIONS

WORKING RANGE	610m+ Diameter (Receiver Dependent)
ACCURACY	2.0mm @ 30m
LEVELLING TYPE	Servo Motor 4 Degrees
BATTERIES	4 x C cells
OPERATING TIME	115 Hrs (Alkaline) 95 hrs (NiMH Recharge)
ROTATION SPEED	600rpm
ENVIRONMENTAL	Water & dust proof IP55
OPERATING TEMP	-20° to 60°C
SLOPE CAPABILITY	Single Axis Dial-in Grade to 25% (0.01% increments)
WARRANTY	5 Year Warranty

AS2 Bundles

AS2 w/ R7
PS-AS2-R7

AS2 w/ R8
PS-AS2-R8

AS2 w/ Storm
PS-AS2-ST

Proshot AS2 Magnum Long Range Fully Automatic Grade Laser

The Pro-Shot AS2 Magnum includes all the features of the AS2 above but shoots further and with more accuracy. The kit will also include a Dual grade adaptor that allows, through the use of a chart system, to dial in dual grades.

- **Horizontal Fully Automatic Self-Levelling**
- **Dial-In Grade up to 25% in 0.01% increments**
- **Higher Accuracy Specication over the standard AS2**
- **1200 RPM mode doubles the refresh rate for machine receivers**
- **Over a Kilometre of working Range**
- **Anti-Drift Height Alert and Low Battery Indicator**
- **Compound Slope Dual Grade Adapter Included**
- **Lifetime Warranty - 5 years No Cost**

SPECIFICATIONS

WORKING RANGE	1200m+ Diameter (Receiver Dependent)
ACCURACY	1.5mm @ 30m
LEVELLING TYPE	Servo Motor 4 Degrees
BATTERIES	4 x C cells
OPERATING TIME	70 Hrs (Alkaline) 55 hrs (NiMH Recharge)
ROTATION SPEED	600, 900, 1200rpm
ENVIRONMENTAL	Water & dust proof IP55
OPERATING TEMP	-20° to 60°C
SLOPE CAPABILITY	Single Axis Dial-in Grade to 25% (0.01% increments)
WARRANTY	5 Year Warranty

AS2 Magnum Bundles

AS2M w/ R7
PS-AS2M-R7

AS2M w/ R8
PS-AS2M-R8

AS2M w/ Storm
PS-AS2M-ST

AS2 Accessories

Recharge Kit

Aluminium Tripod

Aluminium Staff

Proshot ALPHA-C Long Range Fully Automatic Cone Laser

The Pro Shot™ Alpha-c laser level has all the durability and performance of the standard Alpha, plus a custom-made precision cone rotor head. Our engineering team hand builds, tests and calibrates each Alpha-c, assuring its performance to industry leading standards. This unique, adjustable, cone projecting head lets you set-up with the laser at the high point, or low point and project a conical sloping reference of laser light. The Alpha-c can project up to a 4% sloped cone either up or down, with increments of 0.25%. An optional version provides up to a 1.7% sloped cone reference, with even greater resolution to 0.1%. The Alpha-c is especially helpful for sports fields where a standard plane-only laser just won't get the job done.

Alpha C w/ R7
PS-ALPHAC

SPECIFICATIONS

WORKING RANGE	610m+ Diameter (Receiver Dependent)
ACCURACY	1.5mm @ 30m
LEVELLING TYPE	Servo Motor 5 Degrees
BATTERIES	4 x C cells
OPERATING TIME	100 Hrs (Alkaline) 65 hrs (NiMH Recharge Kit)
ROTATION SPEED	600rpm
ENVIRONMENTAL	Water & dust proof IP56
OPERATING TEMP	-10° to 50°C
SLOPE CAPABILITY	Coning Grade +/-1.7% or +/-4%
WARRANTY	5 Year Warranty

Proshot ALPHA-V Fully Automatic 5 Arc Second Plumb Laser

Starting with the highly reliable Alpha chassis, our engineering team hand builds and tests this specialty laser to exacting standards. Precision vertical and plumb alignment laser. Extreme accuracy for your largest projects.

- ***Superior accuracy puts you in control***
- ***Long range for your biggest projects***
- ***Servo leveling for one button start-up***
- ***Built tough to survive real jobsite use***

Alpha V w/ R7
PS-ALPHAV

SPECIFICATIONS

WORKING RANGE	100 meters
ACCURACY	±5 arc sec. up / ±1 arc min. down
LEVELLING TYPE	Servo Motor 5 Degrees
BATTERIES	4 x C cells
OPERATING TIME	100 Hrs (Alkaline) 65 hrs (NiMH Recharge Kit)
SPOT DIAMETER	9.5mm at Appeture / 12mm at 100m
ENVIRONMENTAL	Water & dust proof IP56
OPERATING TEMP	-10° to 50°C
SLOPE CAPABILITY	None
WARRANTY	5 Year Warranty

Spectra Precision LL500 Compensated Levelling Laser

Includes HL700 Laserometer Receiver

The Spectra Precision® Laser LL500 Laser Level is a one-person leveling system designed for longer range measurements across your entire site. Accurate, stable and reliable, the LL500 features a 1,600 ft (500 m) working diameter which increases productivity by reducing the need for multiple setups on a large job site. The rugged LL500 is self-leveling with built-in "out-of-level" shutoff that maintains accuracy over the entire work area and minimizes errors. Visible "spotting" beam determines receiver mounting placement makes it faster to find the on-grade position.

- **High accuracy with temperature compensation provides highly stable, repeatable accuracy even under large temperature changes**
- **Alkaline or rechargeable batteries keep the unit working and minimize downtime due to power loss**
- **Self-leveling with built-in shut off for increased accuracy over the entire work area and reduced errors**
- **Comes with choice of HL700 or CR600 receivers so you can choose the best option to suit your application**

SPECIFICATIONS

WORKING RANGE	500m+ Diameter
ACCURACY	1.5mm @ 30m
LEVELLING TYPE	Wire Hung Compensator
BATTERIES	4 x D cells
OPERATING TIME	175 Hrs (Alkaline) 100 hrs (NiMH Recharge)
ROTATION SPEED	600rpm
ENVIRONMENTAL	Water & dust proof IP54
OPERATING TEMP	-20° to 50°C
SLOPE CAPABILITY	None
WARRANTY	5 Years (3 Years No Cost)

LL500
w/ HL700 & Alkaline Batteries
SP-LL500

Accessories

Aluminium Tripod
A-B-HD-D

Aluminium 3M Staff
A-B-3M-MM

Aluminium 5M Staff
A-B-5M-MM

Cut 'n Fill Genno Rod
A-B-GENNOII

Spectra Precision LL300 Horizontal Automatic Levelling Laser

Includes HL450 Laserometer Receiver and Recharge Kit

The rugged LL300 laser can withstand drops of up to one meter onto concrete and tripod tip-overs up to 1.5 metres. This strength, combined with full weatherproofing and dust proofing, reduces downtime and lowers repair costs over the life of the product. The LL300 laser's self-leveling capability and optional RC601 remote control result in outstanding accuracy and ease of use. Since the LL300 laser levels itself when turned on, setup is easy with fewer controls to deal with. The RC601 remote control gives you the option of matching slopes or having slopes-on-grade.

- **Unit survives 1 m / 3 ft drops onto concrete minimizing downtime and repair costs**
- **One button operation – for easy set-ups**
- **Excellent water protection - for all weather conditions**
- **2.2 mm at 30 metres accuracy – for good performance**
- **Spotting beam – for easily finding the beam's elevation**
- **Two-stage battery indicator – for better planning**
- **Multiple power options – eliminates power loss downtime**
- **Optional Remote Control – for grade matching at the receiver**
- **5 Year Manufacturers Warranty**

Optional Remote

SPECIFICATIONS

WORKING RANGE	400m+ Diameter
ACCURACY	2.0mm @ 30m
LEVELLING TYPE	Servo Motor
BATTERIES	4 x C cells
OPERATING TIME	90 Hrs (Alkaline) 45 hrs (NiMH Recharge Kit)
ROTATION SPEED	600rpm
ENVIRONMENTAL	Water & dust proof IP54
OPERATING TEMP	-20° to 50°C
SLOPE CAPABILITY	Single Axis Manual Slope Matching
WARRANTY	5 Years (3 Years No Cost)

LL300
w/ HL450 & Alkaline Batteries
SP-LL300

LL300
w/ HL450 & Rechargable Batteries
SP-LL300-4

LL300
w/ CR600 & Alkaline Batteries
SP-LL300-10

Accessories

RC601
Remote Control
SP-RC601

LL300
Spare Carry Case
SP-Q103345

LL300
Rechargable Batt. Pack
SP-Q103311

LL300
Smart Charger
A-SP-1281-8220

Aluminium Tripod
A-B-HD-F

Aluminium 3M Staff
A-B-3M-MM

Aluminium 5M Staff
A-B-5M-MM

Cut 'n Fill Genno Rod
A-B-GENNOII

Spectra Precision HV301 Automatic Horizontal / Vertical Laser

The automatic, self-leveling Spectra Precision™ Laser HV301 is an high quality tool with exceptional versatility and visibility. Whether your job site is indoors or outdoors, the HV301 is capable of handling a wide variety of horizontal, vertical and plumb applications. Its high-visibility beam enables 90-degree simultaneous rotating and plumb/perpendicular references.

- Composite housing is rugged and lightweight, withstanding a drop of up to 1 metre
- Fully automatic self-leveling in both horizontal and vertical for easier setups
- Highly visible beam and scanning functions for improved jobsite visibility
- Long-range remote control provides convenient access to key functions across the jobsite
- Flexible power options, including rechargeable batteries, AC power and Alkaline batteries, combined with low battery warnings ensure you can always keep on working
- Optional Remote Control – for grade matching at the receiver
- 3 Year "Over The Counter" Exchange Warranty
- Includes HL450 Laserometer Receiver

SPECIFICATIONS

WORKING RANGE	400m+ Diameter
ACCURACY	2.0mm @ 30m
LEVELLING TYPE	Servo Motor
BATTERIES	4 x C cells
OPERATING TIME	90 Hrs (Alkaline) 45 hrs (NiMH Recharge Kit)
ROTATION SPEED	600rpm
ENVIRONMENTAL	Water & dust proof IP54
OPERATING TEMP	-20° to 50°C
SLOPE CAPABILITY	Single Axis Manual Slope Matching
WARRANTY	5 Years (No Cost)

Optional Remote

Optional Wallmount

HV301
w/ HL450
SP-HV301

Accessories

HL450
Laserometer
SP-HL450

RC601
Remote Control
SP-RC601

M300
Wallmount
SP-M300

HV301
Rechargable Batt. Pack
SP-Q103311

HV301
Smart Charger
A-SP-1281-8220

Aluminium Tripod
A-B-HD-F

Aluminium 3M Staff
A-B-3M-MM

Aluminium 5M Staff
A-B-5M-MM

Cut 'n Fill Genno Rod
A-B-GENNOII

Spectra Precision HV301G High Visibility Interior Green Beam

Includes Wallmount, Remote Control, and Recharge Kit

The Spectra Precision® Laser HV301G green laser beam is easy to see in interior jobsite conditions. The superior visibility of the green beam is useful for extended working ranges or in bright conditions. The beam stays visible for efficient work in these less than ideal conditions. The versatile HV301G automatically self-levels in both the horizontal and vertical modes and can be used in a wide variety of applications.

Designed to be used by interior contractors, the HV301G laser is easy to set up and use. Intuitive controls allow operators to carry out many functions with simple one-touch commands. A 360 degree remote control is included and allows operation of key functions over the jobsite. A heavy-duty metal universal mount is included in the package and fits in the hard-shelled carrying case.

- **Composite housing is rugged and lightweight, withstanding a drop of up to 1 metre**
- **Fully automatic self-leveling in both horizontal and vertical for easier setups**
- **Highly visible GREEN beam and scanning functions for improved jobsite visibility**
- **INCLUDED Long-range remote control provides convenient access to key functions**
- **Flexible power options, including rechargeable batteries, AC power and Alkaline batteries, combined with low battery warnings ensure you can always keep on working**
- **5 Year Warranty**

SPECIFICATIONS

WORKING RANGE	400m+ Diameter (with optional Detector)
ACCURACY	2.0mm @ 30m
LEVELLING TYPE	Servo Motor
BATTERIES	4 x D cells
OPERATING TIME	90 Hrs (Alkaline) 45 hrs (NiMH Recharge Kit)
ROTATION SPEED	600rpm
ENVIRONMENTAL	Water & dust proof IP54
OPERATING TEMP	-20° to 50°C
SLOPE CAPABILITY	Single Axis Manual Slope Matching
WARRANTY	5 Years (No Cost)

LASER RADIATION
AVOID DIRECT EYE EXPOSURE
CLASS 3A/3R LASER PRODUCT

HV301G
w/ Remote, Wallmount & Rechargeable Batteries
SP-HV301G

Accessories

HR150U
Universal Receiver
SP-HR150U

HL750U
Universal Laserometer
SP-HL750U

RC601
Remote Control
SP-RC601

M300
Wallmount
SP-M300

HV301
Rechargable Batt. Pack
SP-O103311

HV301
Smart Charger
A-SP-1281-8220

3.7m Telescopic Tripod
A-B-HD-T

Aluminium 5M Staff
A-B-5M-MM

Spectra Precision GL412 / GL422 Dial-in Grade Lasers

Includes HL700 Radio Receiver, Remote Control and Recharge Kit

The Spectra Precision® Laser GL412 single grade and GL422 dual grade transmitters are rugged, cost effective, automatic self-leveling lasers that do three jobs — level, grade, and vertical alignment. Both the GL412 and GL422 include a 2-way, full-function radio remote control with a built-in back-lit grade display. You can do everything with the remote control that you can do at the laser keypad, up to 100 m away from the laser—even from the cab of a machine!

- *Fast, easy horizontal level, Dial in grade and vertical plumb setup with no manual leveling*
- *Easy setups with the 2-way, full-function radio remote control and single and dual grade application capability offer quick payback*
- *Automatic temperature and grade compensation eliminates rework*
- *Very long operating range of 800 m (2,600 ft) for GL422 increases machine control capability and reduces setups over the jobsite.*

Applications

- *Leveling concrete forms and footers*
- *General construction vertical alignment and plumb such as anchor bolt and form alignment*
- *Grading and excavating*
- *Concrete sections with runoff for sports fields, tennis courts and driveways*
- *Steep slope road embankments and ditch banks*
- *Parking garages, ramps and drainage*

SPECIFICATIONS

WORKING RANGE	400m+ Diameter
ACCURACY	2.0mm @ 30m
LEVELLING TYPE	Servo Motor
BATTERIES	4 x C cells
OPERATING TIME	90 Hrs (Alkaline) 45 hrs (NiMH Recharge Kit)
ROTATION SPEED	600rpm
ENVIRONMENTAL	Water & dust proof IP54
OPERATING TEMP	-20° to 50°C
SLOPE CAPABILITY	Single Axis Manual Slope Matching
WARRANTY	5 Years (3 Years No Cost)

GL422
Dual Grade w/ HL700
SP-GL422

GL4XX Accessories

CR600
Machine Receiver
SP-CR600

HL700
Laserometer
SP-HL700

RC402
Remote Control
SP-RC402

GL4XX
Spare Carry Case
SP-O103598

GL4XX
Rechargable Batt. Pack
SP-O103311

GL4XX
Smart Charger
SP-1281-8220

Seco Tri-Max Tripod
A-S-90553

3.7m Telescopic Tripod
B-HD-T

Aluminium 5M Staff
B-5M-MM

Seco Fibreglass 5M Staff
S-92046

Seco Fibreglass 7.6M Staff
S-98013

Spectra Precision GL612 / GL622 Next Generation Grade Lasers

Includes Receiver, Remote Control and Recharge Kit

The GL612 is a single grade laser and the GL622 is a dual grade laser. Both are rugged, automatic self-leveling lasers featuring grade capability of ± 25% and can be used in a wide variety of grading, excavating and alignment applications by general and specialty contractors.

- *Automatic electronic self-leveling provides fast, easy horizontal level, grade, and vertical plumb setup*
- *Large compensated grade range from -25% to +25%*
- *Quick setups with the radio remote control for horizontal, vertical and grade applications*
- *Electronic Leveling Vibration Filter dampens vibrations typically experienced on tall tripods, in high winds, or on high vibration jobsites.*
- *No rework due to automatic temperature and grade- and cross axis compensation*
- *Automatic Axis Alignment doing precise automatic axes alignments to a desired alignment points without positioning the receivers 90° perpendicular*
- *(+/-40° alignment range on Y- and X-axis)*
- *Automatic Grade Match (Y- or X-axis separate) measures and displays the existing grade over unknown ground and eliminates time consuming and error prone calculations, time spent searching for grade plans, and over excavating (X- only GL622)*
- *Automatic PlaneLok (Y- or X-axis) automatically locks on to an existing elevation or vertical alignment point which eliminates all drift or possibility of error due to improper calibration or weather (X- only GL622)*
- *Very rugged, survives a 1 m (3 ft) drop on concrete—reduces service and repair costs*
- *Mask mode eliminates interference with other crews on the jobsite*

SPECIFICATIONS

WORKING RANGE	800m+ Diameter using a Class 3A Laser
ACCURACY	1.5mm @ 30m (20 arc sec grade accuracy)
LEVELLING TYPE	Servo Motor with Temp. Compensation
BATTERIES	4 x D cells (NiMH and Alkaline)
OPERATING TIME	35 Hrs (Alkaline) 40 hrs (NiMH Recharge Kit)
ROTATION SPEED	0 to 900rpm - with Scan and Shutter Modes
ENVIRONMENTAL	Water & dust proof to IP67 - 1m Drop Rating
OPERATING TEMP	-20° to +50°C
SLOPE CAPABILITY	3 Axis Automatic Dial in Grade ± 25%
WARRANTY	5 Years

Applications

- *General construction leveling such as forms, footers and pads*
- *Precision placement of concrete for critical specification surfaces over long distance and with laser controlled screeds (Automatic PlaneLok)*
- *Drift free general construction vertical alignment and plumb for anchor bolt installation, plus form, tilt up and curtain wall plumbing (Automatic PlaneLok)*

GL612
Single Grade
w/ HL700
SP-GL612

GL622
Dual Grade
w/ HL700
SP-GL622

GL622
Dual Grade
w/ 2 x HL750
SP-GL622-1

GL6XX Accessories

CR600
Machine
Receiver
SP-CR600

Seco
Tri-Max
Tripod
S-90553

3.7m
Telescopic
Tripod
B-HD-T

Aluminium
5M Staff
B-5M-MM

Seco
Fibreglass
5M Staff
S-92046

Seco
Fibreglass
7.6M Staff
S-98013

Spectra Precision UL633 Universal 3-Axis Grade Laser

Overview

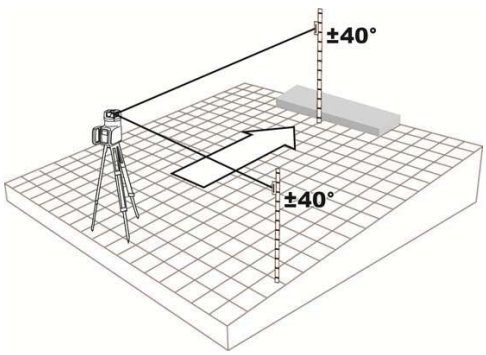
- ***Pipe Laser and Dual Grade Laser in one***
- ***Large grade range from -25% to +25% in all three axis***
- ***Two radio channels for automatic dual axis alignments***
- ***Automatic alignment of the Pipe Target (SF601)***
- ***Accuracy -*** *Temperature compensated Dual PlaneLok*
- ***Robust -*** *IP67 and backed by a Full 5 Year Warranty*
- ***Versatile -*** *More features than anything on the Market*
- ***Designed for a range of General Construction and Machine Control applications***
- ***Significantly improves productivity***
- ***Anti-Vibration Filter for all jobsite conditions***
- ***Unlimited dual axis features***
- ***Large, intuitive, graphic display***
- ***Mask Mode***
- ***Flexible battery options***

Not just another laser transmitter...

The Spectra Precision UL633 is the first construction laser allowing total automatic control of all three axes (X/Y/Z). Control of the Z axis is accomplished through the new "fan beam" technology, while control of the X and Y axis utilizes a dual radio connection.

The universal laser can provide precise automatic axes alignments to two desired points without positioning the receivers 90 degrees perpendicular. ie. No need to have a "perfect" 90° perpendicular field or hubs; the alignment range is from 10 to 170 degrees! Additionally, Since the UL633 can work with two receivers simultaneously, contractors can measure an unknown grade value automatically between two elevation points in Grade Match mode.

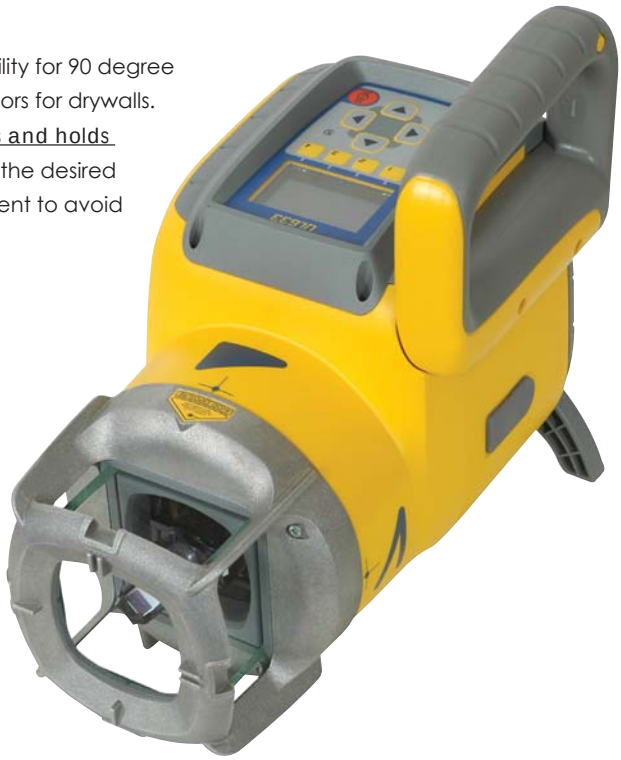
On jobsites where maximum accuracy and stability is required such as airport runways, elevations can be precisely secured using the automatic Dual Axis PlaneLok feature. This capability locks and maintains the laser reference plane to two receivers placed at existing elevation points, eliminating drift or possible errors caused by vibrations or temperature changes.



Dual Grade Laser and Pipe Laser in One!

The UL633 is also the first laser where the plumb beam can be changed into a rotating fan beam which can be detected by the new SpotFinder SF 601. The UL633 can align the plumb beam automatically to the SpotFinder for pipe laying and trench applications. Measuring a grade value through an existing pipe or an open trench can also be done quickly and easily in automatic Spot Match mode.

The UL633 and the Spot Finder offer additional versatility for 90 degree layout applications on concrete pads as well as indoors for drywalls. Activating the SpotLok mode ensures the UL633 locks and holds the plumb beam automatically to the Spot Finder at the desired direction or elevation point offering a precise alignment to avoid rework.



Four Z-Axis Modes:

- *Spot Search - Finds the SF601 Automatically*
- *SpotLok - Tracks and fixes to the SF601*
- *Spot Align - for Pipe/Trench Alignment*
- *Spot Search - SF601 guides you to the beam*

Bullet

With its rugged design, the German designed and manufacturerd UL633 can survive a drop of up to 1 meter (3 feet) on concrete.
The laser also features IP67 moisture and dust sealing to handle the tough construction environment. Spectra Precison stand behind all these featrues by giving the UL633 a full **5 Year Warranty!**

Applications

- General construction leveling such as forms, footers and pads
- Precision placement of concrete for critical specification surfaces over long distance and with laser controlled screeds (Automatic PlaneLok)
- Drift free general construction vertical alignment and plumb for anchor bolt installation, plus form, tilt up and curtain wall plumbing (Automatic PlaneLok)
- Dual slope grading and steep slope excavating
- Pipe and drainage installations - measuring unknown slopes in existing pipes
- Interior construction - layout of walls and installation of drop ceilings

Packages Available:

UL633 — **Basic Kit**
Includes HL750 Receiver, RC603 Remote Control and Recharge Kit

UL633-1 — **Dual Grade Kit**
Includes two HL750 Receiver, RC603 Remote Control and Recharge Kit

UL633-14 — **Pipe Kit**
Includes HL750 Receiver, RC603 Remote Control, SF601 Spot Finder and Recharge Kit

UL633-24 — **Ultimate Kit**
Includes two HL750 Receiver, RC603 Remote Control, SF601 Spot Finder, Sighting Scope and Recharge Kit

SPECIFICATIONS

WORKING RANGE	800m+ Diameter using a Class 3A Laser
ACCURACY	1.5mm @ 30m (20 arc sec grade accuracy)
LEVELLING TYPE	Servo Motor with Temp. Compensation
BATTERIES	4 x D cells (NiMH and Alkaline)
OPERATING TIME	35 Hrs (Alkaline) 40 hrs (NiMH Recharge Kit)
ROTATION SPEED	0 to 900rpm - with Scan and Shutter Modes
ENVIRONMENTAL	Water & dust proof to IP67 - 1m Drop Rating
OPERATING TEMP	-20° to +50°C
SLOPE CAPABILITY	3 Axis Automatic Dial in Grade ± 25%
WARRANTY	5 Years

Bundles

UL633
Basic Kit

UL633-1
Dual Grade Kit

UL633-14
Pipe Kit

UL633
Ultimate Kit

Accessories

RC603
Remote Control

SF601
Spot Finder

HL750
Radio Receiver

1243-0101
Sighting Scope

B-LWT
Staff Holder

B-HD-W
Wooden Tripod

Spectra Precision GL720 Long Range Grade Laser

New challenges demand new solutions. The fiercely competitive, 21st century construction environment has created a whole new set of business challenges. With increasing accuracy requirements and faster completion times, your bids need to be razor-sharp just to compete. As the leader in construction positioning technology, Trimble continually provides innovative solutions to help you gain the edge and succeed in this environment. Among these are new solutions to help you precisely control difficult tasks like longrange, high- accuracy elevation control and fine grading for major construction projects.

- *High powered beam for excellent performance in high dust conditions.*
- *Accurate Temperature Compensation - Accurate, stable results regardless of temperature changes*
- *No rework due to automatic temperature and grade- and cross axis compensation*
- *Axis Alignment for doing precise grade work over distance*
- *Very rugged, all metal build*
- *Selectable rotation speeds*
- *Intuitive, Simple controls makes the GL700 series easy to use and learn*
- *25% grade range on the slope axes (±10% on the cross axis)*
- *900m+ working diameter*
- *Optional scope for quick setup and alignment.*

Applications

- *General construction leveling such as forms, footers and pads*
- *Civil construction grading and excavating*
- *Sports fields, driveways, ramps and drainage*

Includes:

Each GL700 series grade laser comes complete with Laser, Receiver, Charger, NiMH Rechargeable Batteries, Power Cord, Receiver Manual, Laser Card, Laser Manual, and Rugged Waterproof Carrying Case.

SPECIFICATIONS

WORKING RANGE	900m+ Diameter using a Class 2 Laser
ACCURACY	4.6" level accuracy, 0.001% grade accuracy
LEVELLING TYPE	Servo Motor with Temp. Compensation
BATTERIES	6 x D cells (NiMH and Alkaline)
OPERATING TIME	35 Hrs (Alkaline) 40 hrs (NiMH Recharge Kit)
ROTATION SPEED	0 to 900rpm
ENVIRONMENTAL	Water & dust proof to IP67
OPERATING TEMP	-20° to +50°C
SLOPE CAPABILITY	Y-Axis -5% to +25%, X Axis ±10%
WARRANTY	5 Years

GL720
Dual Grade
□□HL700
SP-GL720

GL7XX Accessories

CR600
□achine
Receiver
SP-CR600

Seco
Tri-□a□
Tripod
S-90553

Seco
Telescopic
Tripod
S-5321-17-ORG

□uminium
5□ Staff
B-5M-MM

Seco
Fi□eglass
5□ Staff
S-92046

Seco
Fi□eglass
7□□ Staff
S-98013

BEAR POLAR HL Fully Automatic Horizontal Laser

The Bear Polar HL is fully automatic self-leveling laser capable of fast and accurate levelling tasks. Once you see the Polar HL for yourself, you'll know right away that it's the best value in general construction lasers today.

- One button operation
- Includes a NiMH Recharge kit with Smart Charger
- Manual Grade / Slope Matching (Dual Axis) using optional Remote
- 2 Year Manufacturers Warranty

Standard package includes a Polar HL Laser, Rechageable Battery Pack with Smart Charger, User Manual and a Heavy Duty Carry Case.

Remote Control

Add Grade ability to your Polar HL

Optional

Genno Rod

Take direct cut or fill readings - No Maths!

Optional

Choose a Receiver that suits your needs and your budget....

Digirod

Rodless grade checker with a digital millimetre readout and Distance Measuer in one.

5 Year Warranty

Storm

Digital millimetre readout and longer range capabilities

3 Year Warranty

Lightning

Dual faced Receiver with a loud beeper

2 Year Warranty

HR150U

Compact Waterproof Receiver

2 Year Warranty

Standard

Entry Level Receiver at a economic price point

3 Month Warranty

See the REC pages for further details on these receivers...

SPECIFICATIONS

WORKING RANGE	500m+ Diameter Using a Class 2 Laser
ACCURACY	3mm @ 30m
LEVELLING TYPE	Servo Motor ±5°
BATTERIES	4 x C cells
OPERATING TIME	60 Hrs (Alkaline) 35 hrs (NiMH Recharge Kit)
ROTATION SPEED	600 rpm
ENVIRONMENTAL	Water & dust proof IP54
OPERATING TEMP	-10° to 50°C
SLOPE CAPABILITY	Manual Slope Matching 8% (with Remote)
WARRANTY	2 Year Warranty

POLAR HL Bundles

POLAR HL w/ Standard Receiver
B-POLARHL-PR

POLAR HL w/ HR150U
B-POLARHL-HR

POLAR HL w/ Lightning
B-POLARHL-L2

POLAR HL w/ Storm
B-POLARHL-ST

POLAR HL w/ DigiROD
B-POLARHL-DR

Accessories

Remote Control
B-POLAR-REM

□□aline Batter□ Tra□
B-POLAR-ALK

included
normally $55

□luminium Tripod
A-B-HD-F

□luminium 3□ Staff
A-B-3M-MM

□luminium 5□ Staff
A-B-5M-MM

Cut □ Fill Genno Rod
A-B-GENNOII

BEAR POLAR HV Fully Automatic Horizontal / Vertical Laser

The Bear Polar HV features Horizontal, vertical and plumb beam operation for an exceptionally affordable price. The Polar's bright red beam makes it perfect for a wide range of interior or exterior construction projects. Increase productivity and improve accuracy. Standard features include self-leveling, rechargeable batteries, selectable slope and rotation speeds, HI "laser disturbed" alert, beam scanning and plumb beam. It's Perfect for levelling, alignment, transfering heights and so much more!

- Manual Grade / Slope Matching / Vertical Alignment (Dual Axis)
- Selectable Rotation Speed and Scanning functions for interior applications
- Includes both Alkaline batteries and NiMH Recharge kit with Smart Charger
- 2 Year Manufacturers Warranty 3 Year Extended Supplier Warranty

AN AMAZING 5 Year Warranty

Standard package includes a Full function remote for hands-free operation, 2 sets of batteries (Rechageable with Smart Charger and an Alkaline Backup pack), Reflective Target, User Manual and a Heavy Duty Carry Case.

The POLAR Series of Lasers gives you the freedom to choose a detector that suits your needs and budget. Need a compact detector for work inside and out? Choose the Thunder. Need a dector that can measure Cut 'n Fill in 6 metre deep trenches without a staff? then pick a Digirod option. See the **REC** page for more information on the detectors....

Optional B-WM Heavy Duty Wallmount

Choose a Receiver that suits your needs and your budget.....

Digirod
Rodless grade checker with a digital millimetre readout and Distance Measuer in one.
5 Year Warranty

Storm
Digital millimetre readout and longer range capabilities
3 Year Warranty

Lightning
Dual faced Receiver with a loud beeper
2 Year Warranty

HR150U
Compact Receiver with LED
2 Year Warranty

See the page REC for further details on these receivers...

SPECIFICATIONS

WORKING RANGE	500m+ Diameter Using a Class 3R Laser
ACCURACY	2mm @ 30m
LEVELLING TYPE	Servo Motor ±5°
BATTERIES	4 x C cells
OPERATING TIME	55 Hrs (Alkaline) 30 hrs (NiMH Recharge Kit)
ROTATION SPEED	0 - 600 rpm with Scanning Modes
ENVIRONMENTAL	Water & dust proof IP54
OPERATING TEMP	-10° to 50°C
SLOPE CAPABILITY	Dual Axis Manual Slope Matching 8%
WARRANTY	5 Year Limited Warranty

POLAR HV w/ Bear Receiver
B-POLARHV-PR

Polar HV Bundles

POLAR HV w/ HR150U
B-POLARHV-HR

POLAR HV w/ Lightning
B-POLARHV-L2

POLAR HV w/ Storm
B-POLARHV-ST

POLAR HV w/ DigiROD
B-POLARHV-DR

Accessories

Remote Control
B-POLAR-REM

□□aline Batter□Tra□
B-POLAR-ALK

Wallmount
A-B-WML

□uminium Tripod
A-B-HD-F

□uminium 3□ Staff
A-B-3M-MM

□uminium 5□ Staff
A-B-5M-MM

Cut □ Fill Genno Rod
A-B-GENNOII

BEAR POLAR HVG Automatic Ultra Bright Green Beam Laser

The Bear Polar HVG has all the features of the standard Polar HV like Horizontal, vertical and plumb beam operation but with an ultra bright Green beam. The HVG's Laser Beam is up to four times brighter than conventional red beams. The POLAR HVG comes with three power options for convenience and flexibility: alkaline, rechargeable, and AC run/charge when you have access to power on site.

- Ultra bright Green Beam that's up to **4x Brighter** than other lasers.
- Adjustable Wallmount included for ceiling fitouts.
- Remote Manual Grade / Slope Matching (Dual Axis) for Raked Ceiliings
- Selectable Rotation Speed and Scanning functions for interior applications
- Includes both Alkaline batteries and NiMH Recharge kit with Smart Charger
- 2 Year Manufacturers Warranty

Adjustable Wallmount (included)

Standard package includes the HR150U Receiver, Adjustable Wallmount, Full function remote for hands-free operation, 2 sets of batteries (Rechageable with Smart Charger and an Alkaline Backup pack), Reflective Target, User Manual and a Heavy Duty Carry Case.

The inlcuded Spectra HR150U Receiver is an excellent receiver for contractors involved in extensive interior construction and remodeling work and is the perfect receiver for smaller jobsites. The dual-sided LED display and built-in **magnetic mount** make it ideal for interior leveling and aligning applications.

Receiver Features and Benefits:

3-channel dual-sided LED display that can be easily seen indoors or outdoors over long distances for increased accuracy and ease of use. Built-in magnet allows the receiver to mount to ceiling grid or drywall track without the need for additional accessories. Marking notches on both sides make it easy to mark alignments and elevations. Strong composite housing offers protection against damage can withstands drops of up to 1.5m. The unit is also water and Dustproof to a IP67 Standard.

Perfect partner to the Polar HVG for Interior and exterior leveling and aligning Soffit, curtain wall or glazing applications Ceiling grid and raised floor installations.

SPECIFICATIONS

WORKING RANGE	500m+ Diameter Using a Class 3R Laser
ACCURACY	2mm @ 30m
LEVELLING TYPE	Servo Motor ±5°
BATTERIES	4 x C cells
OPERATING TIME	55 Hrs (Alkaline) 30 hrs (NiMH Recharge Kit)
ROTATION SPEED	0 - 600 rpm with Scanning Modes
ENVIRONMENTAL	Water & dust proof IP54
OPERATING TEMP	-10° to 50°C
SLOPE CAPABILITY	Dual Axis Manual Slope Matching 8%
WARRANTY	2 Year Warranty

POLAR HVG no Receiver
B-POLARG

Polar HVG Bundles

POLAR HVG w/ Standard Receiver
B-POLARHVG-PR

POLAR HVG w/ HR150U
B-POLARHVG-HR

Accessories

Wallmount
A-B-WML

Remote Control
B-POLAR-REM

□□aline Batter□Tra□
B-POLAR-ALK

3□m Telescopic Tripod
A-B-HD-T

□uminium 3□ Staff
A-B-3M-MM

□uminium 5□ Staff
A-B-5M-MM

Proshot Vertical Mount

- Mounts ***Any Brand*** of laser in vertical mode
- Aligns laser for projecting a ***vertical*** plane either along the ground or mounted to a tripod.
- Two holes in top allow it to be fastened to a wall for ***horizontal*** applications.
- Tough Lexan construction.
- Fits inside Pro Shot L3 &/or L5 Carry Case.
- Sits on the ground or attached to a tripod using 5/8 x 11 thread.

PROSHOT Vertical Mount
PS-VM2

PROSHOT Wall Mount
PS-W1

Proshot Heavy Duty Wall Mount

- Mounts ***Any Brand*** of laser on the wall (using nails) or suspended ceiling (using 2 screw clamps).
- Can also be used to mount the laser in vertical mode either on the ground or mounted to a tripod.
- Can be disassembled into two pieces.
- Aluminium and Lexan construction.
- Fits inside Proshot L4.7 Magnum Case and/or L6 Case.
- Adjustable laser platform

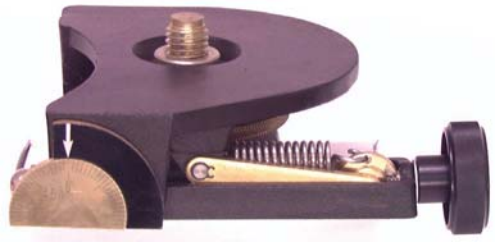
Bear Standard Wallmount

- Fits inside Polar Cases
- Largest Clamping width allows clamping to both wooden studs and suspended ceiling brackets.
- Mounts ***Any Brand*** of laser in ***horizontal*** or ***vertical*** as above
- Adjustable laser platform with 5/8 x 11 male thread
- Secure clamps for ceiling grid
- Inbuilt female 5/8 x 11 for vertically mounting units to tripods

BEAR POLAR Standard Wall Mount
B-WML

Seco - Laser Grade Adapter

- Adjustable mount for setting up laser at desired grade
- Laser must have out-of-level shut off feature / Manual mode for system to work
- Fits on tripod with standard 5/8 x 11 thread



Grade Adaptor
S-42-11

AS2 Compound / Dual Grade Kit

- For use with AS2 and L1-AS lasers for applications that require **dual slope**
- **Includes Grade Chart for calculating dual slopes using the dial and grade input on the laser.**

Dual Grade Kit
PS-S2

Plumb Plate

- Used with any 5/8 x 11 spot lasers ie. L4.7 Magnum to position the unit directly over a point on the ground. Perfect for transfering plumb from ground to ceiling.
- More accurate than using a dot laser.

Plum Plate
PS-P1

Magnetic Target

- For use in ceiling applications with **all** brands of lasers
- Features inbuilt Magnets and measurments in both inches and Centimeters

agnetic Target
B-T

Laser Glasses

- Available in ***RED*** or ***GREEN***
- Improves visibility of beam
- Use with rotational or Line / Dot lasers

Laser Glasses
B-LG

Carry Case for Proshots

- To suit L3, L4.7, L5, AS2 & AS2M
- To suit L4.7 Magnum and L6

S LL PR SH T C S S
PS-L4.7CASE
PS-L5CASE
PS-AS2CASE
PS-AS2MCASE

L RG PR SH T C S S
PS-L4.7MCASE
PS-L6CASE

R1 Charger Kit

- For use with Proshot L4.7, L4.7Mag, AS2 & AS2M lasers
- Includes 4 x C-cell NiMH batteries and Smart Charger with Charging indicator light

R1 Charge Kit
R1

R1 Charger hl
R1CHG

Bear Scientific Receiver with Clamp

- Perfect Receiver for those on a budget
- 3-channel dual-sided display
- Marking notches make it easy to mark alignments and elevations
- Adjustable Deadband
- Works with Red Lasers (B-PR) or Green (B-PRG)
- 3 Month Warranty
- Water and Dust Rating - IP20

Bear PR
with Clamp
B-PR

Bear PRG
with Clamp
B-PRG

PR/PRG Clamp
A-PC

Spectra HR150U Receiver with Clamp

- 3-channel dual-sided LED display that can be easily seen indoors or outdoors over long distances for increased accuracy and ease of use.
- Built-in magnet allows the receiver to mount to ceiling grid or drywall track without the need for additional accessories
- Marking notches on both sides make it easy to mark alignments and elevations
- Featuring a tough composite material housing, the HR150U Laser Receiver can withstand a drop of up to 1.5 meters to a hard surface. The HR150U is the perfect entry-level receiver for smaller job sites.
- Works with Red / Green & IR Lasers.
- 2 Year Replacement Warranty

2 year warranty

Spectra HR150U
with clamp
SP-HR150U

HR150U Clamp
A-SP-C61

Proshot R7 Receiver with Clamp

- Display: 5 channel LCD front, 3 channel LED rear
- Reception Height: 50mm
- 3 Accuracy Settings: 0.4mm, 1.6mm, 3.2mm
- Audio Settings: *mute, low, high*
- Auto Switch Off: 12 mins without laser strike
- Battery: 9V
- Low Battery Indicator
- 5 Year Warranty

PRO SHOT LASER California • USA

5 year warranty

Proshot R7
with Clamp
PS-R7W/CLAMP

R7 Clamp
PS-R7C

Apache Lightning 2 / R8 Receiver with Clamp

- Available with Apache Lightning 2 Decal or Proshot R8 Decal
- Display:11 channel LCD front & rear
- Additional 3 colour, 3 channel LED display on front. Easy to read in low light conditions and over long distances.
- Reception height: 50mm
- 4 Accuracy settings: 0.1mm, 1.0mm, 2.0mm, 3.0mm
- Audio Settings: *mute, low, high (100dB !)*
- Auto Switch Off: 30 mins without laser strike
- Strobe light rejection filter: eliminates false readings from job site strobe lights
- Built-in vial on clamp to ensure receiver is level
- Patented reversible mounting jaws on clamp give a vice-like grip on all sizes and shapes of rods, including round and oval
- Battery: 2 x AA
- Low Battery Indicator
- Water & Dust Proof: IP67
- ***"No Excuses" Warranty: if it breaks within 2 years we will replace it***

2 year warranty

Apache Lightning II
with Clamp
AP-LGT2-Y

Proshot R8
with Clamp
PS-R8

Spare Clamp
Lightning II/R8
AP-LT2C

Apache Storm Laserometer Receiver and Clamp

The Apache® Storm Laserometer, a highly versatile laser receiver for basic and advanced leveling and aligning applications, is designed for general, concrete and site preparation contractors. The Storm is an easy-to-use tool that accurately measures elevations across the site, and is ideal for use with any rotating transmitter.

The Storm features a digital readout of elevation that provides a numeric display of +/- 5 cm. The readout is displayed on the large front and rear LCD's and shows exactly how far the elevation is from on-grade. Accurate measurements can be made without moving the rod clamp, saving time and increasing productivity. Selectable units of measure can be displayed meeting your application - mm, cm, ft, in or fractional inches.

A 12.7 cm reception height, more than double the industry standard, allows quick acquisition of the laser beam. An anti-strobe sensor prevents false readings from site strobe lights.

The Laserometer is designed to survive the tough construction site conditions; it is totally waterproof and can withstand a drop of 3 meters onto concrete. The Storm offers a 3-year "No Excuses" warranty.

3 year warranty

- Display: 21 channel LCD front & rear
- Digital readout displays exactly how high or low the laser strike is in mm, cm , feet, inches and fractions of an Inch
- Additional 2 colour, 3 channel Super-Bright LED display on front.
- Easy to read in low light conditions.
- Reception height: 127mm
- 6 Accuracy settings: 0.1mm, 0.5mm, 1.0mm, 2.0mm 5.0mm, 10.0mm
- Audio Settings: mute, low, high
- Auto Switch Off Selectable: none, 30 mins or 24 hours without laser strike.
- Strobe light rejection filter eliminates false readings from job site strobe lights
- Built-in vial to ensure receiver is level
- Adjustable sensitivity to laser: low, med, high
- Battery: 2 x AA
- Low Battery Indicator
- Water & Dust Proof: **IP67**
- "No Excuses" 3 Years Warranty...

If it breaks within 3 years we will replace it!

Spectra Precision HL750 Radio Receiver

All the features of the The Apache® Storm Laserometer, but with the addition of a radio module which unlocks the following features...

- Works with another HL750 for long range remote display and monitoring capability.
- The HL750 also communicates with the GL5 series and UL6 Series Grade Lasers for PlaneLok and Automatice Grade /Slope Matching capabilities.
- Universal version available (HL750U) that will pick up any rotating laser (Infrared, Red Beam & Green Beam)

3 year warranty

Apache Storm
with Clamp
AP-STORM-Y

Storm Clamp
AP-STC

Spectra HL750
with Clamp
SP-HL750

Spectra HL750U
with Clamp
SP-HL750U

HL750/U Clamp
SP-ATI400103-01V

Spectra Precision **DR400** DigiRod Laserometer

The only receiver on the market that doesn't need a staff!

- The DR400 is a combination Laserometer (Storm/HL700) with a built in electronic laser staff. The DR400 combines both functions (receiver and staff) in a handheld receiver sized package.
- The DR400 is 3 products All-in-One:
  - A DigiRod system
  - A handheld laser distance meter
  - A Laserometer Digital Receiver using a clamp
- Built in angle sensing and COMPENSATION up to 30° allows remote measurements in deep excavations without danger, reduces trips down into the excavation, and practically eliminates rod tilt errors
- Emulates rods as long as 6m in a package only 30cm long that you can wear on your belt

The Spectra Precision® **DR400** DigiRod eliminates the need for grade rods when checking grades with a rotating laser. The all-in-one combination of a laser receiver with digital readout, laser distance meter, and built-in tilt sensor provide the information required to take rod-less, accurate grade readings, even at tilt angles up to 30 degrees.

The DigiRod emulates all rod types including Direct Reading, Cut/Fill and Indirect grade rods up to 6 m long. The user simply places the laser distance meter spot on the location a grade check is required, picks up the rotating laser beam anywhere on the reception window, and the distance from ground to the rotating beam is measured and displayed. Errors due to rod math and out of plumb grade rods are eliminated. The rod-less grade checking system increases safety as workers do not have to climb down in trenches or lean over unstable excavation edges to obtain elevations.

As a stand-alone laser distance meter, the DigiRod is designed to give contractors a one-person distance measuring and estimating tool to measure remote and difficult-to-reach places such as high overheads, factory interiors, or over water.

The Laserometer provides a large backlit LCD screen that gives a bright, clear digital readout of elevation and has 5 accuracy selections to match any job site tolerance requirement.

5 year warranty

Spectra DR400
with clamp
SP-DR400

DR400 DigiRod Bundles

POLAR HL w/ DigiROD
B-POLARHL-DR

Alpha XD w/ DR400
PS-ALPHAXD-DR

DR400 Accessories

DR400 Handle
A-SP-0400-1900

DR400 Pouch
A-SP-0400-1930

DR400 Clamp
SP-ATI400103-01V

Spare Receiver Clamps

A-AP-THC	to suit Apache Thunder, Bear Polar, CR1-E & R6 Receivers
A-AP-LTC	to suit Apache Lightning, CR2 or R8 Receivers
A-AP-LT2C	to suit Apache Lightning 2 & Twister Receivers, including bubble
A-AP-CYCC	to suit Apache Cyclone Receivers (also Leica Rodeye)
A-AP-STC	***Black*** to suit Apache Storm Receiver (also HL700, HL750)
A-SP-ATI400103-01V	**Grey** to suit Spectra HL700/750/750U/450
A-SP-C61	to suit Spectra HR150U
A-B-PR	to suit Bear Polar Receiver
A-B-LLRC	to suit Bear LLR Line Laser Receivers

Thunder Clamp
A-AP-THC

Lighning 1 Clamp
A-AP-LTC

Lighning 2 **Clamp**
A-AP-LT2C

Cyclone Clamp
A-AP-CYCC

Storm Clamp
A-AP-STC

Polar Receiver Clamp
A-B-PRC

LLR Receiver Clamp
A-B-LLRC

HL750/U Clamp
SP-C70

HL150U Clamp
A-SP-C61

CR5 - 240 degree Machine Receiver - includes staff clamp

- Rugged and durable machine mounted or hand held receiver
- Provides visual and audio grade information
- 125mm reception height
- 240 degrees reception angle
- industry leading strobe light rejection inbuilt
- 180 hours use (alkaline)
- Automatic shut off after 30mins with no laser strike
- Water and dust proof
- Multiple mount capability - MAGNETS built into the housing to snap onto machine or alternatively use rod clamp
- Comes with hard carry case
- Runs on 2 x AA batteries
- 3 Deadband settings - wide, medium & fine
- 5 channel back lit LCD display
- Ultra bright LED display with Green on-grade
- 3 brightness settings - bright, dim or off
- Remote display optional - Wired or wireless available

2 year warranty

Made in Canada

Latec CR5
I-FT-CR5

CR5 w/ Wireless Remote
I-LA-SR-wR

Latec Magna Plumb
I-LA-MP-2

CR600 - 270 degree Machine Receiver - includes staff clamp

The Spectra Precision® Laser CR600 Receiver is ideal for contractors doing both site prep and general construction. The CR600 can be either rod or machine mounted, making it ideal for a wide range of applications. Using the magnetic mount, the CR600 receiver is easily moved between backhoes, small excavators, box blades or skid steer loaders. With such a high degree of flexibility, the CR600 needs to be tough enough for any job.

- Designed for tough construction site conditions. Rugged, waterproof, lightweight magnesium housing can withstand a drop of up to 3 m on concrete.
- Super-bright colored LED elevation indicators visibly indicate grade elevation information to the operator even in poor light and up to 100 min bright sunlight.
- Adjustable bandwidth lets the operator tighten the on-grade band to easily meet a variety of accuracy requirements with tighter tolerances from rough grading through form leveling.
- Wraparound receiver cells with continuous pickup through an operating range of 270 degree provide less dead spots and improved productivity, especially for machine applications.
- Longer, above-grade receiver cells make digging with a back hoe easier than ever.

2 year warranty

Made in USA

Spectra CR600
A-SP-CR600

Laserguide R.45BM and R.45TC Machine Receiver

The R.45.TC is the first of its kind, the unit is a small magnetic receiver for earth moving machines with automatic tilt compensation. Traditionally when using magnetic receivers on small excavators the boom arm needs to be plumb when taking references, otherwise errors will occur. The R.45TC eliminates this check as the receivers centre band will auto correct the tilt dependant upon the boom position.

Additionally the R.45TC Incorporates 3 accuracy settings fine, medium and wide to suit all job site. The unit uses bright LED clusters to give the operator clear view of the lasers striking set-up reference and a loud buzzer which can be turned on and off to prolong battery life.

The R.45BM is a simpler version mini receiver without tilt compensation and only uses LED clusters to visually communicate with its user the lasers striking set-up reference. The strong and compact R.45BM allows the operator to dig to grade first time and can be integrated into the machine cabin through a panel, providing automatic or manual control of the blade position. The R.45BM sensor can be used with most kinds of excavation machinery and makes digging to grade a one man operation.

No more re-work, no more grade-checks, no more stopping to make adjustments. In fact the only thing you need to stop for.....is a coffee.

Benefits

- Check work level from the cab.
- Easily move R45.TC / R.45BM from one machine to another.
- Be a one-man one-machine Grading crew.

Features

- Low cost
- Quick Mount
- Battery Powered
- Waterproof
- Bright LED Display
- 220° Reception Range

Specifications:

	R.45TC	R.45BM
Size:	325 x 125 x 60mm	275 x 120 x 60mm
Weight	1.8kg	1.7kg
Power Supply:	Single D Cell	Single D Cell
Deadband Adjustment:	Yes (3)	No (fixed 6mm)
Audio Signal:	Yes	No
Tilt Compensation:	Yes	No
Reception Length:	190 mm	110mm

AUSTRALIAN MADE

2 year warranty

Laserguide R.45BM
I-MCE-R.45-BM

Laserguide R.45TC
I-MCE-R.45-TC

Laserguide R.45CAN
I-MCE-R.45-TC

BULLSEYE 3+ - 360 degree Machine Control Receiver

- Green LEDs for on grade indication
- 171mm vertical reception, Greater than 460m operating range (depending on laser)
- 3 Selectable accuracies allow work from rough grading to finishing
- ±2.5 ° Plumb Swing Range
- Ultra -bright LED display - settings of either Bright or Dim
- 75min automatic shut off with no laser strike, 2 hour warning for low battery indicator
- 50 hour battery life (alkaline - bright setting) or 40 hour battery life (NiMH - bright setting)
- Quickly clamps to standard sized pipe (42-50mins) for no-slip mounting (either pipe welded to machine or see the optional heavy duty magnetic mount).
- 3-4 hour recharge time for NiMH batteries, can be run off machine power
- Waterproof contsruction - designed to withstand all weather conditions IP67

2 year warranty

Apache BE3+
I-AP-BE3+

BULLSEYE 5+ - 360 degree Machine Control Receiver

- Green LEDs for on grade indication, On Grade offset mode for excavation tasks
- On grade offset mode for excavation tasks
- Blade tilt settings of ±0.5, ±1.5 & ±2.5 degrees. ***Available without see BE5M***
- 3 plumb settings of ±0.5, ±1.5 & ±2.5 degrees ***Available without see BE5M***
- 171mm vertical reception window
- Greater than 460m operating range (depending on laser)
- 3 selectable accuracies allow work from rough grading to finishing
- ±2.5 ° Plumb Swing Range, ultra -bright LED display - settings of either Bright or Dim ***Available without see BE5M***
- 75min automatic shut off with no laser strike, 2 hour warning for low battery indicator
- 45 hour battery life (alkaline - bright setting) or 30 hour battery life (NiMH - bright setting)
- 3-4 hour recharge time for NiMH batteries, can be run off machine power
- Quickly clamps to standard sized pipe (42-50mins) for no-slip mounting (either pipe welded to machine or see the optional heavy duty magnetic mount).
- Waterproof contsruction - designed to withstand all weather conditions IP67

2 year warranty

Apache BE5+
I-AP-BE5+

BULLSEYE 5MC - Proportional laser receiver

The BULLSEYE 5MC is specially designed to work with laser control systems. It has no internal batteries; power must be supplied by cable from the machine. The small LED grade information display is typically used for set-up only.

- 17 cm of high resolution proportional reception
- Accuracy is set at control box
- 360° reception angle - picks up the laser from all directions
- Durable, shock and vibration absorbing, waterproof construction

2 year warranty

Apache BE5MC
I-AP-BE5M

BULLSEYE 6 - 360 degree Machine Control Receiver

- World's first and only self-contained, on board, Angle Compensation for Excavation (ACE). ACE automatically calculates and corrects the grade display for the angle of the dipper arm.
- On grade offset mode for excavation tasks
- ±2.5° Swing Range (plumb mode), ±10° to ±30° Swing Range (ACE mode)
- Greater than 460m operating range (depending on laser)
- 4 selectable accuracies (in grading mode) 2 selectable accuracies (in ACE mode) allow work from rough grading to finishing.
- 2 hour warning for low battery indicator , 45 hour battery life (alkaline - bright setting) or 30 hour battery life (NiMH - bright setting)
- 3-4 hour recharge time for NiMH batteries, can be run off machine power, 4 x C-cell NiMH (75hrs), 4 x C-cell alkaline (50hrs)
- Quickly clamps to standard sized pipe (42-50mins) for no-slip mounting (either pipe welded to machine or see the optional heavy duty magnetic mount).
- Waterproof contsruction - designed to withstand all weather conditions IP67

2 year warranty

Apache BE6
I-AP-BE6

Remote Display Kit
I-AP-RD20

Magnetic Mount
I-AP-MM

CB26 Single Control Coil Kit
I-AP-CB52S
Without Receivers

CB52 Dual Control Coil Kit
I-AP-CB52C
Without Receivers

AMA - SLP Pipelaser *Made In Sweden*

AMA LASER

AMA
SLP
I-AMA-SLP

RUGGED, RELIABLE AND EASY TO USE

The SLP is developed for the toughest of laser applications - pipe laying. It has a shock proof and water tight metal housing. It features a fully built-in battery with a very long operating life from each charge. The large control panel and the long range, visible laser beam makes the SLP easy to use. Unique automatic functions enable very fast and accurate setup.

PIPE LAYING - A TOUCH APPLICATION

The SLP is engineered to withstand heavy wear during many years of hard use. The housing is manufactured in aluminium. Even the remote control is made out of metal, waterproof and rugged. The battery is completely enclosed to avoid problems with leakage and poor contact found with interchangeable battery packs, or inconvenience with external power cables.

EASE OF USE

The SLP is designed for easy operation. The laser beam is clearly visible and workable over a range of up to 200m. Push button symbols and commands are logical and easy to understand. Advanced functions that make operation easier for the experienced user, are hidden and will not distract the inexperienced user. The display is large and legible, and it is angled upwards to be easily read from above. Its backlight can be operated from the remote control to make the display visible in poor light. The SLP has a large battery capacity. A full 7 hour charge will give well over a working week's operation. In emergency cases, 30 minutes of charge will give you a full day's use. The SLP can also be powered from an external battery using the supplied 12 volt cable.

QUICK SET-UP

The SLP is quick and simple to set up for a new job.The laser beam travels fast. It will rarely take more than 10 seconds from power on to full accuracy. This means fast set-up. The SLP can be placed in the pipe with a large cross-axis tilt (+/-3º). The grade is automatically compensated to full accuracy making it easy to get the laser in place. The automatic plumb line beam travel enables you to side align the beam at any height. The beam will always travel vertically, even if the laser is placed with a large cross-axis tilt angle. You can place a rod on the edge of the trench in line with both manholes, pull up the beam with the remote control (up to 40% grade) and side align the beam onto the rod. Thereafter you let the beam go down to the working grade - the SLP keeps the side alignment accurate.

- Super tough design, all aluminium IP67 housing, suspension mounted mechanic
- High visibility angled display, readable over a distance of 5M.
- Fully compensated grade gives vertical alignment when rolled in the X-axis.
- 2 button commands, for azimuth cantering and grade zeroing.
- Programmable security code, can help with lower plant insurance bills.
- Programmable service intervals, preventing unforeseen breakdowns.
- Programmable tilt function, increasing peace of mind for above ground setup´s.
- Special extreme environment battery pack, specified for -20° to +70° C. Giving a run time of over 150 Hrs under normal conditions.
- The SLP package includes the **Pipe Laser, Built in NiMH Battery Pack, Smart Charger, Full Function Remote, Target, Legs and 12 Volt Cable.**

3 year warranty

Spectra Precision Dialgrade DG711

An Industry standard in Pipe Lasers

The rugged Spectra Precision® DG711 DialGrade Pipe Laser is built tough for long lasting performance and reliability for the installation of gravity flow sanitary and storm sewer pipelines, pipe jacking and tunnel boring. The DG711 is completely waterproof and designed to ensure easy cleanup.

The DG711 features the largest automatic leveling range in the industry, providing quick, easy setups, regardless of the grade. Unlike traditional pipe lasers, there is no need for rough leveling thus minimizes crew training. Simply set up the laser in the pipe, manhole or open cut, set the proper grade and start working. Setup is fast with a full range of mounting accessories available, and easy to use with straightforward, "no-instructions-required" controls.

The DG711 has the additional features of Line Alert and Line Set-Check that the DG511 does not have. Line Alert is a unique feature that is ideal for working in high-vibration or wet conditions where the pipe lasers may be disturbed. Line Set-Check feature is ideal for rechecking the line in pipe jacking pits after each push.

In addition, through the Service Alert feature, they keep track of their own maintenance needs, indicating at pre-set intervals when it's time for a check-up. The D711 stands up to corrosion from acids, chemicals, salts and other destructive underground elements as well as to the physical abuse typical in the construction industry.

SELF-LEVELING

The DG711 and DG511 feature the largest automatic leveling range in the industry providing quick, easy set-ups, regardless of grade. Unlike traditional pipe lasers, they eliminate the need for rough leveling and minimize crew training. Simply set up the laser in the pipe, manhole or open cut without the need to swivel or rough level the unit. No need to reset the unit or HI, over the center point when rough leveling.

LINE ALERT

This unique feature is ideal for working in high-vibration or wet conditions where the pipe lasers may be disturbed. The beam flashes to notify you that the setup line has been disturbed, eliminating the necessity of rework. Combined with the self-leveling warning, you'll always complete the job correctly, on time and on budget!

LINE SET

The Line Set/Check capabilityof the pipe laser allows you to raise the beam outside of the trench for fast line setup or checking. Raising the laser beam out of the trench to an above-ground stake saves you time—instead of having to move the excavator off line during setup of the pipe laser, you can just get on with your job. In addition, the Line Set-Check feature is ideal for rechecking the line in pipe jacking puts after each push.

The DG711 package includes the **DG711 Pipe Laser, NiMH Battery Pack, Smart Charger, P20B Alkaline Battery Pack, RC502 Full Function Remote, 956 Target, and 8 inch Invert**

5 year warranty

AMA SLP
I-SP-DG711

Scope Handle Kit
A-SP-1233

12V DC Power Cable
A-SP-P21

Alkaline Battery Pack
A-SP-P20

NiMH Battery Pack
A-SP-P23

Cigarette Lighter Charger
A-SP-P22

Invert Plate
A-SP-1237

DEVON® SuperCross Compact Laser

- Visible laser lines make it ideal forsetting tile or alignment work
- Automatic Level: automatic alignment via magnetic pendulum system.
- Out-Of-Level: is indicated by acoustic signals when the unit is outside its self-levelling range.
- Additional slope mode to align angled surfaces.
- Transport lock: A pendelum lock protects unit during transport.
- Folding supporting feet ensure a stable position during alignment work
- Always on-hand with the practical carrying softbag.
- Simple operation: the laser cross is switched on and off at the press of a button.

Devon SCross
I-DV-MINIXL

1 year warranty

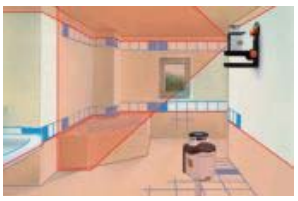
DEVON® SmartLine Laser 360°

- Automatic Level: automatic alignment via magnetic pendulum system
- The horizontal laser line produces a continuous 360° laser line
- Ideal for almost any alignment job
- With the optional laser receiver RX up to a max. of 30 m radius – ideal
- for all interior and exterior applications
- Individually switchable laser lines
- Out-Of-Level: is indicated by optical signals when the unit is outside its self-levelling range
- Additional slope mode to align angled surfaces
- Transport lock: a pendelum lock protects unit during transport
- Multi-functional tripod-/wall mount: height-adjustable with 1/4“ and 5/8“ tripod
- Simple, uniform operating techniques

Devon SLine
I-DV-360L

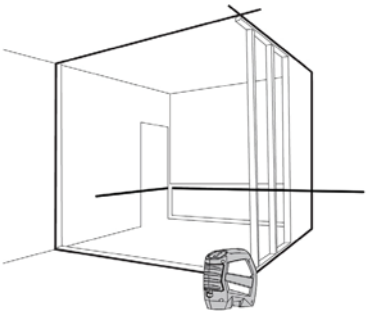
Package includes mini tripod, glasses & soft case!

1 year warranty



DEVON® LL3X Self Levelling Cross Line Laser

- Crosslines out the front and above the unit.
- 90° Line to the left and Plumb Dot below
- Pulsed laser - works with LLR Detector up to 50m
- Power Output: ≤ 2mW CLASS III
- Wave Length: 635nm/ line. 650nm/dot
- Accuracy of horizontal lines: ± 3mm @ 10m
- Auto Self-Levelling Range: ± 4°
- Levelling Time: < 2 Seconds
- Compensator Lock
- Working Temperature Range: - 5°C - +50°C
- Pocket Size with a IP54 Rating
- Weight: 500g
- Belt Carry Case
- Includes Heavy Duty Magnetic Mount



1 year warranty

Ideal for....

- Electricians (downlights, Centering a Room)
- Transferring Plumb Points
- Floor and wall tilers
- Installing cabinets, windows, doors, kitchens
- Drop ceilings, wall studs, dry walls
- Pipe, conduit, bathrooms

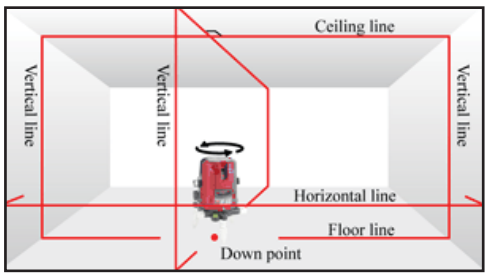
Bear Scientific LL6 MINI / G - Fully Self-leveling Multi Line Laser

Now also available in High Intensity Green Beam

- 4 Vertical lines all at 90° - wrap around walls and produce a cross directly above the unit.
- 1 Horizontal line for checking levels & 1 Plumb point down
- Lockable magnetically damped compensator
- Bright visible beams for indoor use
- Optional receiver for outdoor use - B-LLR
- Beams will flash when out of self-leveling range
- Slow motion tangent screw for easy setting of vertical lines
- Compensator lock for safe transport
- Includes: Hard Case, Rechargeable Kit, Manual & Laser Glasses, 240 Volt Kit (Green Beam only)

SPECIFICATIONS

WORKING RANGE	<40m Radius with Detector
ACCURACY	6mm @ 30m
LEVELLING TYPE	Precision Compensator
BATTERIES	3 x AA cells
OPERATING TIME	40 Hrs (Alkaline) 25 hrs (Recharge Kit)*
LASER BEAMS	4 Vertical 1 Horizontal 1 Down Spot
ENVIRONMENTAL	Water & dust proof IP54
OPERATING TEMP	-10° to 40°C
SIZE	80mm wide x 150mm High
WARRANTY	1 Year



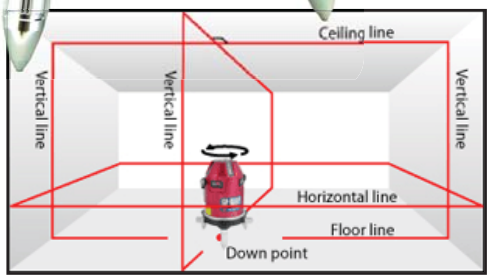
Bear Scientific Servo 360HP / G - High Precision Servo Drive Line Laser

Now also available in High Intensity Green Beam

- Indoor/outdoor laser with 360° Horizontal Beam
- 4 visible vertical lines at 90° to each other
- 360° rotation with slow motion fine adjustment
- Manual slope in both X and Y axes
- Plumb down point
- Can be used indoors and outdoors with receiver
- Includes: Hard Case, Rechargeable Kit, Manual, Laser Glasses. 240 Volt Kit (Green Beam only)

SPECIFICATIONS

WORKING RANGE	<50m Radius with Detector
ACCURACY	3mm @ 30m
LEVELLING TYPE	Servo Drive
BATTERIES	4 x AA cells
OPERATING TIME	30 Hrs (Alkaline) 15 hrs (Recharge Kit)*
LASER BEAMS	4 Vertical 360° Horizontal 1 Down Spot
ENVIRONMENTAL	Water & dust proof IP55
OPERATING TEMP	-5° to 40°C
SIZE	163mm wide x 222mm High (1.8kg)
WARRANTY	1 Year



**** Green beam operating time typically offers half the running time but double the brightness***

Bear LL6Mini
B-LL6MINI

Bear LL6 Mini G
B-LL6MINIG

LL6Mini Accessories

Bear LLR Receiver
B-LLR

Mini Mag Mount
B-WMS

Large Wallmount
B-WML

LP12 Laserpole
B-LP12

Mini Telescopic Tripod
A-SET

Bear Servo360
B-SRVO360

Bear Servo 360G
B-SRVO360G

Servo 360 Accessories

Bear LLR Receiver
B-LLR

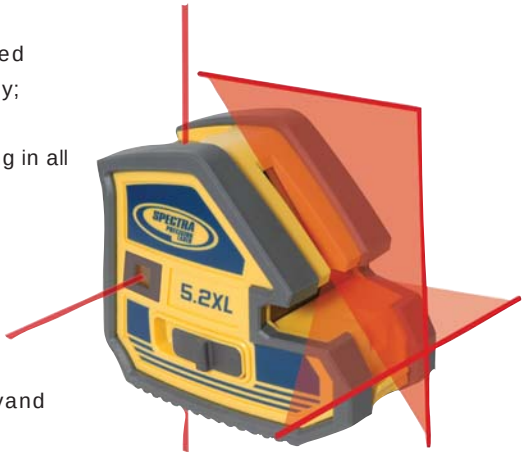
LLRG Green Beam Receiver
B-LLRG

Heavy Duty Wallmount
B-WML

Elevating Tripod
B-MFT

3.7m Telescopic Tripod
A-B-HD-T

Spectra Precision 5.2XL - Rugged Line & Dot Laser

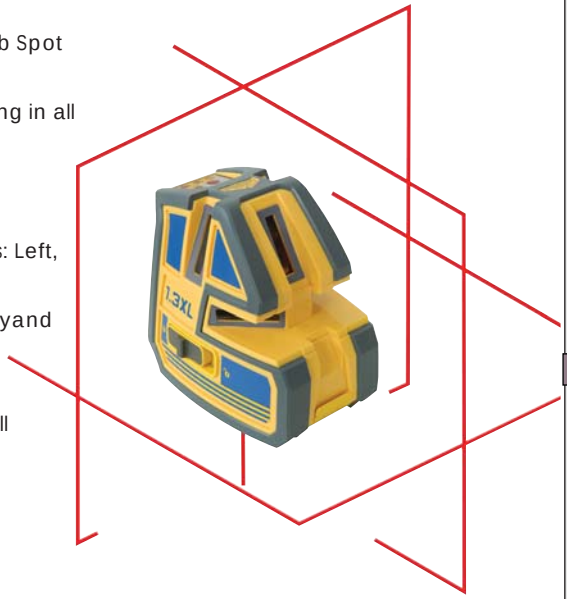


- Self levelling 5 Point Laser and Cross Line Laser combined
- Automatic self-leveling assures fast setup and accuracy;
- Beams blink if out of self-leveling range
- The industry's brightest crossline laser for ease of viewing in all conditions
- Durable unit with protective rubber over-molding
- withstands a drop of up to 3 feet (1 m) onto concrete
- Easy-to-see 150° line coverage. Vertical beam biased upwards to intersect the plumb up point for fast plumbalignment
- Water, mud, and shock-resistant for improved reliabilityand minimal repair costs
- Ships complete in a soft case with mounting accessories and target for all interior applications
- Optional HR220 receiver and many mounting accessories for exterior applications allowing use on all construction projects for maximum versatility
- Works up to 75m Outdoors with detector
- Accuracy 3mm @ 10m
- **Exclusive 3-Year instant exchange warranty**

Spectra 5.2XL
SP-5.2XL

Spectra 5.2XL w/ Detector
SP-5.2XL-2

Spectra Precision 1.3XL - Rugged Line Multi Line Laser



- Self Levelling Full Coverage Cross Line Laser with Plumb Spot
- Beams blink if out of self-leveling range
- The industry's brightest crossline laser for ease of viewing in all conditions
- Durable unit with protective rubber over-molding
- withstands a drop of up to 3 feet (1 m) onto concrete
- Easy-to-see 180°+ line coverage with four intersections: Left, Right, Front and Top all at 90 degrees.
- Water, mud, and shock-resistant for improved reliabilityand minimal repair costs
- Optional HR220 receiver and many mounting accessories for exterior applications allowing use on all construction projects for maximum versatility
- Works up to 75m Outdoors with detector
- Accuracy 3mm @ 10m
- **Exclusive 3-Year instant exchange warranty**

Spectra 1.3XL
I-SP-1.3XL

Spectra 1.3XL w/ Detector
I-SP-5.2XL-2

Accessories

HR220 Detector
A-SP-HR220

LP12 Laserpole
A-B-LP12

Elevating Tripod
A-B-MFT

3.7m Telescopic Tripod
A-B-HD-T

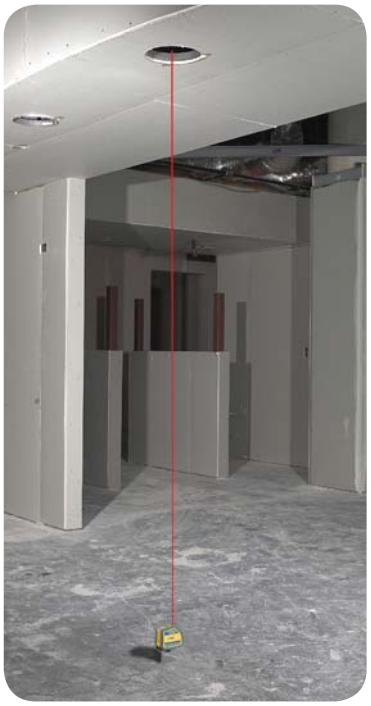
Spectra Precision LP30 & LP50 - Rugged 3 & 5 Dot Plumb Lasers

The Spectra Precision® LP30 and LP50 laser pointers are automatic self-leveling multi-purpose tools that can be used in a wide variety of interior construction applications. For interior building and remodeling, the lasers are used for horizontal and vertical alignment, wall layout, acoustical ceiling installation, point transfer up and down, wall and floor tiles, finish carpentry, and 90 degree squaring.

The LP30 and LP50 are as easy to use as a hand tool and provide one-person replacement of a level, square, plumb bob and tapes (to verify square). Use the LP30 and LP50 every day on every job to increase your jobsite accuracy and finish projects faster than ever!

Features and Benefits

- Automatic self-leveling and plumb assures accuracy and fast setup
- One person installation of walls, doors, ceiling track and other overhead fixtures without the need for a plumb-bob
- Fast, one person 90° layout of rooms, walls, tiles and carpet squares
- Dust, water and shock-resistant for reliability and minimal repair costs
- Exclusive 3-Year instant exchange warranty includes free exchange for the first 2 years
- Durable unit with protective rubber over-molding with stands a drop of up to 3 feet (1 m) onto concrete and still maintains consistent accuracy
- LP50 comes complete in a hard case with mounting accessories and target
- LP30 comes complete in a pouch with mounting accessories and target



LP30
3 Dot Laser
SP-LP30

LP50
5 Dot Laser
SP-LP50

Accessories

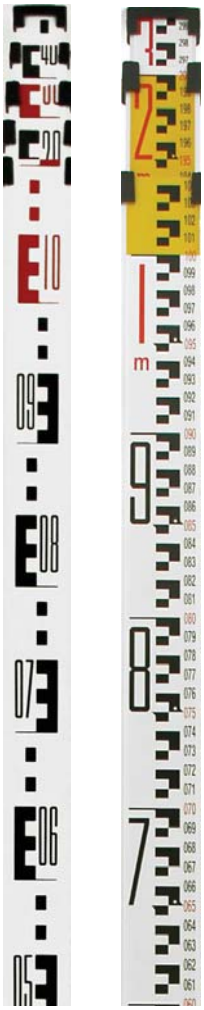
LP12
Laserpole
A-B-LP12

Elevating Tripod
A-B-MFT

3.7m Telescopic Tripod
A-B-HD-T

5 metre, 5piece Aluminium Staff - E pattern

- Continental “E” pattern face - has white background with black and red text alternating each meter section
- Measurements on reverse of staff, designed to measure horizontal and vertical distances in mm - Top down
- Each section locks in place by push button
- Includes heavy duty protective staff cover
- Master carton = Qty 10
- Includes bubble



5 Metre E Face
A-B-5M-E

5 metre, 5piece Aluminium Staff - 1/2 cm pattern

- 1/2cm pattern face - each meter alternates yellow and white background - plus numbering up staff
- Measurements on reverse of staff, designed to measure horizontal and vertical distances in mm - Top down
- Each section lock in place by push button
- Includes protective staff cover
- Master carton = Qty 10
- Includes bubble

5 Metre MM Face
A-B-5M-MM

3 metre, 3piece Aluminium Staff - 1/2 cm pattern

- 1/2cm pattern face - plus numbering staff
- Measurements on reverse of staff, designed to measure horizontal and vertical distances
- Each section lock in place by push button
- Includes protective staff cover
- Master carton = Qty 10
- Includes bubble

3 Metre MM Face
A-B-5M-MM

7.6m Heavy Duty Fibreglass Staff - Non Conductive

- 6 Section, 7.6m height
- Flat/oval shape, E Pattern markings
- Non conductive, anti glare, abrasion resistant
- With inbuilt female screw on top of staff for placement of prism adapter (B-PMA)
- Any brand laser receiver can be mounted to staff
- Graduated on back for normal height/width measurements - Top down
- Includes protective cover

7.6 Metre Fibreglass
A-S-98013

5m Heavy Duty Fibreglass Staff - Non Conductive

- 5 Section, 5.0m height
- Rectangle shape, E Pattern markings
- Non conductive, anti glare, abrasion resistant
- With inbuilt female screw for placement of prism adapter (B-PMA)
- Any brand laser receiver can be mounted to staff
- Graduated on back for normal height/width measurements
- Does not include staff cover

5 Metre Fibreglass
A-S-92046

Genno Rod I

The original “2 in 1 No Maths Rod” Low Cost Cut ‘n Fill Rod

- Use for both laser leveling and conventional optical levels
- Height with extenstion is 3.7m, Increments in mm throughout Rod
- **NEW RECEIVER SLIDE WITH QUICK LEVER LOCK**
- **NEW YELLOW COLOUR CUT & FILL SECTION**
- Locking pin ensures accurate reading in level and extended mode
- Includes storage bag for both rod and extension, plus bubble
- Place your laser receiver on the sliding section and zero to reading on the rod
- Adjust bottom section up or down until receiver reads level
- Includes adjustable Bubble

Genno Cut ‘n Fill Rod
A-B-GENNO-M

Genno Rod II - 2.6m

Heavy Duty - Cut & Fill Rod on one side & normal leveling rod on the other

- Manufactured to the highest European standards
- 3mm thick Aluminium extrusion provides stability & strength
- Use for both laser leveling and conventional optical levels
- Height is 2.6m Increments in mm
- Receiver slide with quick lever lock
- Yellow colour cut & fill section
- Locking pin ensures accurate reading in Staff Mode
- Place your laser receiver on the sliding section and zero to reading on the rod
- Adjust bottom section up or down until receiver reads level
- Includes adjustable Bubble
- Includes heavy duty carry bag, user instructions & orange receiver slide

Genno Rod II
A-B-GENNO-II

Genno Rod II Pro - 3.9m

Heavy Duty - Cut & Fill Rod on one side & normal leveling rod on the other includes height extension

- Manufactured to the highest European standards
- Height with extnsion is 3.9m (snap in extension)
- 3mm thick Aluminium extrusion provides stability & strength
- Use for both laser leveling and conventional optical levels
- Increments in mm throughout Rod
- Receiver slide with quick lever lock
- Yellow colour cut & fill section
- Locking pin ensures accurate reading in staff mode
- Includes adjustable Bubble
- Includes heavy duty carry bag, user instructions & orange receiver slide

Genno Rod II Pro
A-B-GENNO-II-E

Flat Head - Heavy Duty Aluminium Tripod

Alum.Flat Tripod
A-B-HD-F

- ***Dual clamping system*** *- quick release and wing nut*
- Height of tripod with legs fully extended is 1620mm
- Height of tripod with legs closed is 1040mm
- Strap for holding legs closed and easy carrying
- Rubber boots for tripod points to stop sliding on smooth surfaces
- Safety orange colour markings on tripods
- ***Master Carton = 4***

Dome Head - Heavy Duty Aluminium Tripod

Alum.Dome Tripod
A-B-HD-D

- ***Dual clamping system*** *- quick release and wing nut*
- Height of tripod with legs fully extended is 1620mm
- Height of tripod with legs closed is 1040mm
- Strap for holding legs closed and easy carrying
- Rubber boots for tripod points to stop sliding on smooth surfaces
- Safety orange colour markings on tripods
- ***Master Carton = 4***

Flat Head - Heavy Duty Wooden

Wood Flat Tripod
A-B-HD-W

- ***Highest quality wooden legs***
- ***Now has Dual Clamping System*** - quick release and wing nut
- Made from the finest hardware and die cast aluminium parts
- Plastic coated wood for added protection
- 1" diameter dowels support a wide range of instruments
- Height of tripod with legs fully extended is 1780mm
- Height of tripod with legs closed is 1110mm
- Strap for holding legs closed and easy carrying
- ***Master Carton = 2***

Flat Head - Telescopic - Heavy Duty Aluminium

Large Tele. Tripod
A-B-HD-T

- ***Dual clamping system*** *- double quick release*
- Height of tripod with legs and crank fully extended is 3030mm
- Height of tripod with legs closed is 1700mm
- Strap for holding legs closed
- Safety orange colour markings on tripods
- ***Master Carton = 1***

SECO Miniature Aluminium Tripod

- These tripods accommodate 5/8 x 11 instruments and are designed for all types of jobs
- Featured a Twist-Lock and Triangle/Flat head
- The telescopic Aluminum (Round) legs allow for setup to extend 25.5 in (64.77 cm)
- Weighs 3.03 kg

Seco Mini Tripod
A-S-5401-23

SECO Wooden / Fibreglass Composite Tripod

- This heavy-duty tripod features a round head and 5/8 x 11-threaded stud for a variety of instruments
- Twist Locks and leg straps provide stability at height
- The tripod extends to 183 cm and collapses to 118 cm
- A tool kit, which attaches to any leg, includes an open-end wrench and an Allen wrench for making any adjustments to the tripod
- Hand hole built-in for easy carrying
- Wood Weighs 7.48 kg
- Fibreglass Weighs 8.26 kg

Seco Fibreglass Tripod
A-S-5203-10

Seco Wood Tripod
A-S-5220-10

SECO Tri-Max Fibreglass Composite Tripod

- Super strong, very steady - ideal for total and robotic stations
- Durable ultra light fibreglass
- Single clamping System - quick release
- Height of tripod with legs fully extended is 181cm
- Height of tripod with legs closed is 113cm
- Strap for holding legs closed and easy carrying
- All Trimax tripods come with a 5 year warranty and a serialised.

5 year warranty

Seco Tri-Max Tripod
A-S-90550

Tri-Ped Tripod Supports

- Attaches to any tripod or bipod and anchors each leg with weight and non-slip tread
- Saves valuable time and thousands of dollars in repairs or replacement
- Minimizes the risk of damage to instruments on hard surfaces and in strong winds.
- Rugged design, resistant to heat, rain and other harsh elements
- Stablilizes instrument with minimum error on back site checks
- Each disc weight is 3.6 kg
- Diameter 240mm

Triped (Set of 3)
A-B-TRI-PED

Bear Laser Pole

- 5 Section with a 32mm Diameter
- Lightweight with quick clamp metal platform
- Height when fully extended 3.6m
- 5/8 x 11 mounting thread on slide
- Includes carry bag

Laser Pole
A-B-LP12

Multi-Function - Heavy Duty Aluminium Tripod

- ***Quick Release Clamping system***
- Height of tripod with legs fully extended is 1710mm
- Telescopic centre extends to 45cm - total height - *great for setting the correct height for cross lasers, rotational lasers or any other interior product.*
- Height of tripod with legs closed is 1060mm
- Strap for holding legs closed and easy carrying
- Rubber boots for tripod points to stop sliding on smooth surfaces
- The diameter of the circular head is 14cm
- *Unique feet that incorporate rubber for indoor use on floor surfaces and a point for normal use*
- ***Master Carton = 4***

Multi Function Tripod
A-B-MFT

Small Interior Elevating Tripod - Aluminium Tripod

- ***Telescopic Winding Top Section***
- Hollow thread and centre shaft allows instruments with laser plumb dots to be visible on the ground.
- Height of tripod with legs fully extended is 260mm
- Height of tripod with legs closed is 150mm
- 5/8 x 11 thread
- ***Optional:*** Camera Thread Adapter model # B-F5/8-CAM to convert Male 5/8 x 11 to Male Camera Thread

Small Elevating Tripod
A-B-SET

Large Interior Elevating Tripod - Aluminium Tripod

- ***Telescopic Winding Top Section***
- Adjustable Rubber feet perfect for tiles and other smooth surfaces
- Hollow thread and centre shaft allows instruments with laser plumb dots to be visible on the ground.
- Height of tripod with legs fully extended is 1450mm
- Height of tripod with legs closed is 1090mm
- 5/8 x 11 thread
- ***Optional:*** Camera Thread Adapter model # B-F5/8-CAM to convert Male 5/8 x 11 to Male Camera Thread

Large Elevating Tripod
A-B-LET

Bear Level Box - with Magnets & Level

- Highly accurate level bubble, Easy to calibrate,
- Hold function to freeze measurements, Auto shut-off after 5mins
- Measures both absolute & relative angles

Specifications

Measuring Range:	±180°
Accuracy:	0.1 degree 6' of arc
Power:	3V Lithium battery - more than 2,000 hrs
Size:	50 x 64 x 33mm

Level Box
A-B-LB

Bear Digital Protractor

- Large LCD display, Measures both inside and outside angles
- Measures both absolute & relative angles

Measuring Range:	±180°
Accuracy:	± 0.1 degree
Power:	3V Lithium battery - more than 2,000 hrs
Environmental:	IP54
Size:	250mm long, extended blade 300mm

Bear Protractor
A-B-ANGPRO

Bear Digital Level Box / Protractor

- Full 360° range
- Easy to read LCD display which flips over when upside down, Machined stainless steel frame
- Easy to calibrate horizontal
- 3 in 1 Measuring tool - angle finder, protractor & level

Accuracy:	0° - 90° < 0.1°, above 90° < 0.2°
Resolution:	0.1 degree
Power:	3V Lithium battery - 2000Hrs+
Size:	150 x 32 x 60mm

Level Protractor
A-B-DPRO

Bear Digital Anglefinder

- Easy calibration and zero setting
- High accuracy level bubble, Metal Blade can be locked at any angle
- LCD Display, Measures both absolute & relative measurements

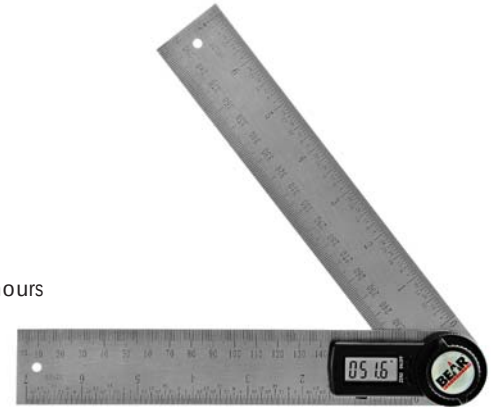
Accuracy:	0.1°
Resolution:	0.05°
Power:	3V Lithium battery - 2,000 hrs+
Size:	260 x 24 x 50mm

Dig. Angle Finder
A-B-DAF

Bear Digital Angle Rule

- Stainless Steel Machine Etched Blade,
- Zero set button, Lightweight
- Measures both absolute & relative angles.

Accuracy:	± 0.3°
Resolution:	0.1°
Power:	Lithium battery - 5,000 hours
Environmental:	IP54
Size:	200mm /7" (32nd), 35mm Wide



DigiRule
A-B-DIGRULE

Devon Digital Levels with Laser Light - Available in 300, 600 & 1200mm

300mm Digital Level
DV-300DL

600mm Digital Level
DV-600DL

1200mm Digital Level
DV-1200DL

DEVON Digital Spirit Level Features

- Angle measurement - Set or checking the rail angle by the LCD display (such as 15 degrees)
- Horizontal measurement - set or checking the level of the conduit of the air condition by the vials or LCD display
- Laser light aperture - the laser inside the left endcap extends a visual leveling line over distances much greater than a traditional bubble vial beam level
- Encased bubble vials - the level or plumb of a surface can also be accurately measured by positioning the bubble inside the vial in between the marks on the vial's surface. The highly sensitive vial ensure the digital level has an accuracy of 0.029 degrees
- LCD display - Large, easy to read display screen reads right side up even when level is upside down. Measure level or plumb with accuracy up to 0.05 degree
- Integrated 57cm ruler - clear 0-57cm ruler helps you to measure anytime

Specifications:

- Length 60cm (600mm)
- Measuring Range: 0-360 degrees
- Accuracy of the digital display: +/-0.05 degree (level or plumb)
- Accuracy of the digital display: +/-0.1 degree (other angles)
- Accuracy of the vial: 0.029 degree
- Laser type: 635-665nm, P</1mW, Class 2 laser
- Battery: 2 x 1.5V AAA batteries

TOOL INCLUDES

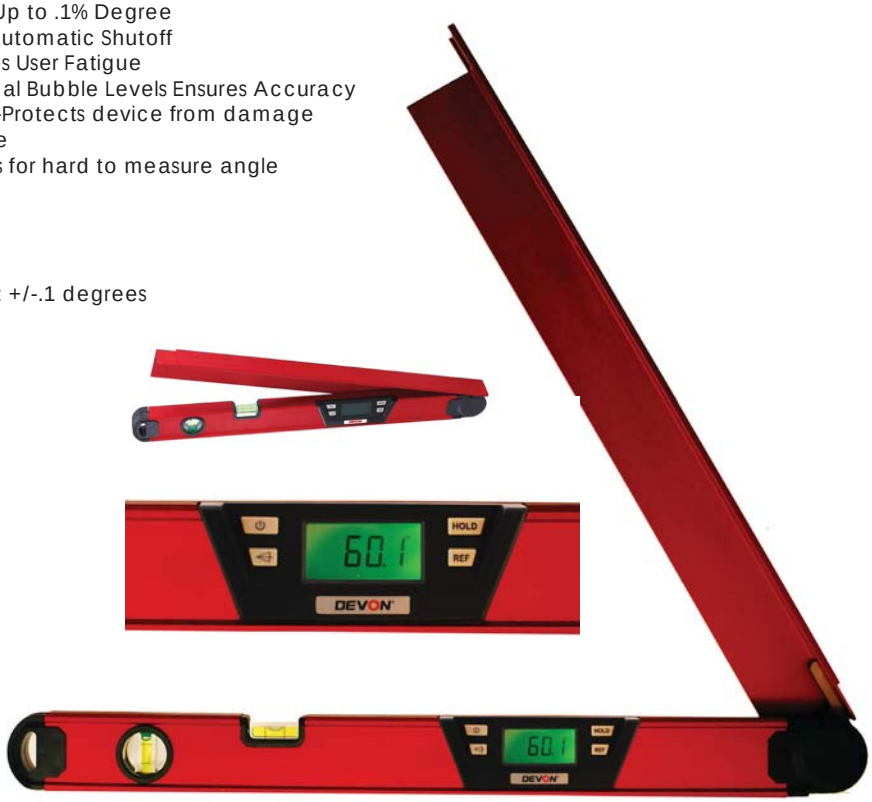
- Digital Spirit Level
- Carry Bag
- Instruction Manual

600mm Angle Finder
DV-600AF

Devon Digital Mitre / Angle Finder

DEVON Digital Angle Finder Features:

- Dual Digital LCD Display Shows Measurements & Calculations front & back
- Miter Button Calculates Miter Angle into Miter Saw Angle
- Accurate Readings Up to .1% Degree
- On/Off Button with Automatic Shutoff
- Light Weight Reduces User Fatigue
- Horizontal and Vertical Bubble Levels Ensures Accuracy
- Cushioned End Cap-Protects device from damage
- Integrated hang hole
- Leg Extension- Allows for hard to measure angle



Specifications:

- Battery: 2 x 1.5v AA
- Electronic Accuracy: +/-.1 degrees
- Height: 60mm
- Length: 420mm
- Range: 0° to 220°
- Weight: 700g

TOOL INCLUDES

- Digital Angle Finder
- Carry Bag
- Instruction Manual

Trotec BD10 Laser distance meter

Quick and easy laser-precision measuring

Trotec
BD10
TRO-BD10

The BD10 is a compact and extremely versatile measuring device which allows you to measure distance, areas and volumes quickly and easily with laser-accurate precision – even in extremely remote or otherwise hard-to-access locations.

You need no longer rely on cumbersome or inaccurate measurements with tape measures or unwieldy folding rules: the BD 10 provides you with unerringly accurate information every time and enables you to calculate your exact requirements as well as the exact amount of materials, for example paint, parquet or tiles, that you will need.

Yet despite a variety of valuable features and useful functions, the BD15 is incredibly easy to use with a single key for each individual function. And because the large multi-line display can be illuminated at the touch of a key, the BD10 can also quite comfortably be used in dark rooms or in daylight.

Key Features & Functions

- For fast and accurate distance, area and volume measurements
- Pythagoras function for indirect measurements
- Illuminated multi-line display – easy to read and also ideal for use in environments with little or poor lighting
- Soft touch shortcut keys
- Fits snugly into the hand – easy to use
- Robust – dust and splashproof (IP54)
- Excellent value for money
- Minimum and maximum measurements
- Non-stop measuring
- Addition and subtraction
- Area and volume measurements
- Indirect measurements using Pythagoras function
- Illuminated display with auto shut off

Technical data

Measuring accuracy type*	±1.5 mm
Range	5cm to 35 m
Units of measurement	m, in, ft
Memory recall	20
Protection class	IP54
Power supply	2 x 1.5 V type AAA
Dimensions L x W x H	28 x 48 x 115 mm
Weight incl. batteries	135 g

Reliable, easy to use and accurate – that's why the Disto™ is no. 1 in its field!

With the latest models of the successfully tested Disto™ product family from Leica Geosystems, which is the no. 1 in the world for hand-held laser meters, you have the right measurement instrument for any application range. You can measure indoor and outdoor distances of up to 200 meters with an accuracy of up to ± 1 mm.

The Disto™ hand-held laser meters are suitable for a wide range of applications, e.g. for calculating areas, volumes and heights, even if they are not easy to measure. However, this is no problem with the Disto™, which is "easy to use". Simple to operate with accurate and reliable measuring results.

Compared to traditional measurement methods, this device allows measurements that can be done by only one person, which make you save time and money.

Stable measuring from corners, over obstructions, angles or heights – no problem with the Disto™. Areas and volumes as well can be measured surprisingly quickly with all Disto™ models.

Due to their high number of advantages the Disto™ hand-held laser meters are the perfect tool to be used by architects, experts of any kind, craftspeople and all whose professions require measuring of distances, areas and volumes.

Disto™ D210

Precision at the touch of a key – far all those who won't compromise on accuracy

Disto™ D210 Product features	Your Benefit
Measuring range 0.05 to 80 m Type accuracy ± 1.0 mm	Quick, precise, and reliable measurements with digital display information
Power Range Technology™	Enables measuring from long distances (approx. 80 m) without target plate
Clear, backlit 3-line display	Quick and easy reading in the dark
Stake Out Function	For staking out evenly-distanced spaces or gaps at irregular intervals
Multi-functional endpiece	For stable measuring from edges or corners
Pythagoras Function	Indirect height and distance measuring for inaccessible places
Painter Function	Determines the whole wall surface of a room without the need for intermediate results
IP54	Dust and splashproof protected – simply a must on construction sites

The compact entrylevel model is equipped with a variety of valuable functions and features to provide you with extremely fast and reliable measurements that are accurate up to ± 1.0 mm. True to the typical Disto™ style and functionality, the D210 has a selection of short-cut eys for popular calculation functions. This allows you to focus on the job at hand and obtain quick and reliable measuring results of which the last ten measurements are always stored automatically.

Compact and light

The Disto™ D210 is light and compact and ergonomically designed. With its smooth soft grip case and elemental, no frills form it not only sits comfortably in the palm of your hand, but also fits snugly into any small bag or pocket.

Painter function

This extremely practical function allows you to determine the surface of all the walls in a room without having to stop, put aside your distance meter and take down the measurements in between!

All you have to do is measure the width of the walls and then add or subtract the measurements accordingly. Multiply the result by the height of the room which you have just determined and what you are left with is the total surface of all the walls!

Disto™ D210 – as effective as it is functional

Scope of supply: Disto™ D210, holster, wrist strap, batteries, manual, software, manufacturer's certificate

Leica D210
LCA-D210

Disto™ X310

100 % reliable – even in the toughest of conditions

Disto™ X310 Product features	Your Benefit
Measuring range 0.05 to 80 m Type accuracy ± 1.0 mm	Quick, precise, and reliable measurements with digital display information
Smart Horizontal Mode ™	A combination comprising distance and tilt measurements designed to enable extremely accurate and easy horizontal distance measurements. When used at a tilt angle of ±45°, the shortest distance is always calculated – also past individuals and objects.
Power Range Technology™	Enables measuring from long distances (approx. 80 m) without target plate
360° Tilt Sensor	A variety of angle and distance measurements available at the press of a key
Height tracking	Measuring the height of trees or buildings which do not provide a suitable reflection point
Stake Out Function	For staking out evenly-distanced spaces or gaps at irregular intervals
IP65 rated	Special dust and splashproof keypad and housing
Clear, backlit 4-line display	Quick and easy reading in the dark

Slush, rain and dust can't stop the Disto™ X310 from performing its measurements! The IP65 rated (dust and jet proof) housing can stand up to the harshest of conditions and you can clean it under running water too!

Tough on the outside, sophisticated on the inside. In addition to direct or indirect distance and height measurements your Disto™ X310, which is equipped with a special painter function, can be used to calculate rectangular and triangular areas, partial heights, angles and volumes quickly and reliably.

A self-timer and a memory designed to store as many as 20 individual measurements results highlight the device's multifunctionality – and make your job easier.

Scope of supply: Disto™ X310, holster, wrist strap, batteries, manual, software, manufacturer's certificate

Robust design

The Disto™ X310 is extremely robust because the housing is protected by massive rubber protectors. Tests have shown that it can withstand a fall from 2 m.

Multifunctional end-piece

Hold the device straight and measure from corners, grooves or edges. This end-piece allows you to be prepared for all possible measuring situations. The automatic end-piece recognition helps you to avoid costly measuring errors.

Disto™ X310 – as robust as it is versatile!

Leica X310
LCA-X310

Disto™ D510

The excellent all-rounder for just about every conceivable application

Disto™ D510 Product features	Your Benefit
Measuring range 0.05 to 200 m Type. Accuracy ± 1.0 mm	Precise, quick and reliable measurements
Digital 4x zoom viewfinder with high-resolution colour display	Distant targets can be measured accurately and comfortably, even in blinding sunlight
Power Range Technology™	Long-range measuring, up to 100 m without and 200 m with fixed target
360° Tilt Sensor	A variety of angle and distance measurements available at the press of a key
Horizontal distance measuring can be carried out with the help of a tilt sensor	Distances can be determined easily despite obstructions which would normally hamper measuring
Height profile measurement	Indicating distances and height differences to a reference point
IP65 rated	Special dust and splashproof keypad and housing
Free App – Leica Disto™ sketch	Supports the sketching of floor plans or tables on suitable smartphones or tablet PCs

No matter if it is about a digital 4x zoom viewfinder for precise long-distance measuring or an integrated 360° tilt sensor – the Disto™ D510 is a combination of many innovative functions and product features, all in one particularly compact and robust measuring device.

Infinitely many measurement possibilities

The 360° tilt sensor does allow both angle and horizontal distance measuring! In combination with the viewfinder there are astonishing indirect measurement possibilities.

This means that measurements can be realized though there is no reflection point, e.g. for height measuring of a reflecting glass front.

Bluetooth™Smart with App

The Disto™ D510 has been adapted to the user prompting of modern mobile phones. The integrated Bluetooth™ Smart allows comfortable and error-free data transmission.

The free App Leica Disto™ supports the sketching of floor plans or tables on suitable smartphones or tablet PCs.

In addition, frequently used functions can be stored with two keys and rapidly called up.

Disto™ D510 – the perfect solution for outdoor measurements.

Scope of supply: Disto™ D510, bag, wrist strap, batteries, manual, manufacturer's certificate

Leica D510
LCA-X310

Technical data and features of all Disto™ models at a glance …

Disto™ model		Disto™ D210	Disto™ X310	Disto™ D510
Measurement accuracy, typical		± 1.0 mm	± 1.0 mm	± 1.0 mm
Range		0.05 m to 80 m	0.05 m to 80 m	0.05 m to 200 m
Power Range Technology™		■	■	■
Smart Horizontal Mode™		–	■	■
ø Laser spot	at a distance of 10 m	6 mm	6 mm	6 mm
	at a distance of 50 m	30 mm	30 mm	30 mm
	at a distance of 100 m	60 mm	60 mm	60 mm
Minimum and maximum measuring		■	■	■
Non-stop measuring		■	■	■
Addition / Subtraction		■	■	■
Area / volume measuring		■	■	■
Stake out function		■	■	■
Indirect measuring using Pythagoras		■	■	■
Painter function (surface with partial measurements)		■	■	■
Triangular and room angle function		–	■	■
Height tracking		–	■	■
Horizontal distance measuring over and around obstructions		–	■	■
Indirect measuring using tilt sensor		–	■	■
Trapeze measurements		–	–	■
Height profile measurements		–	–	■
Bluetooth™ data transfer		–	–	■
Navigational keys for Bluetooth™ applications		–	–	■
Tilt sensor	Measurement range	–	360°	360°
	Accuracy with respect to laser beam	–	± 0.2°	± 0.2°
	Accuracy with respect to housing	–	± 0.2°	± 0.2°
Units of measurement in tilt sensor		–	0.0°, 0.0 %	0.0°, 0.00 %, mm/m, in/ft
Digital viewfinder		–	–	with 4 x Zoom
Save constants		–	–	–
Recall last measurements		10	20	30
Self-timer		–	■	■
Display illumination		■	■	■
Pocket calculator		–	–	■
Free App		–	–	■
Data interface		–	–	Bluetooth™ Smart
Number of measurements per battery pack		up to 5,000	up to 5,000	up to 5,000*
Multifunctional endpiece		automatic	automatic	automatic
Tripod thread		–	■	■
Batteries		Type AAA 2 x 1.5 V	Type AAA 2 x 1.5 V	Type AAA 2 x 1.5 V
Protection class		IP54	IP65	IP65
Dimensions L x W x H		27 x 50 x 114 mm	31 x 55 x 122 mm	29 x 58 x 143 mm
Weight incl. batteries		126 g	155 g	198 g

Trotec BD10
TRO-BD10

Leica D210
LCA-D210

Leica X310
LCA-X310

Leica D510
LCA-X310

Leica D8
LCA-D8

TROTEC Measuring Tools - Basic Range

Trotec BA15 - Impeller Anemometer

Trotec BA15
I-TRO-BA15

- Quick and easy air flow, air temperature, air volume (CFM) measurement
- Semi-flexible, 40 cm swan neck sensor
- Min & Max value function/hold function
- Speed Measuring Range 1.00 - 30.00 m/s, 196 - 5,900 ft/min, 3.6 - 108.00 km/h
- Temperature Measuring Range -10.0 to+60.0 °C (+14.0 to 140.0 °F)
- Air Flow Volume Measuring Range - 0 -999.9 ft³/mini (CFM)

Trotec BC05 - Thermohygrometer

Trotec BC05
I-TRO-BC05

- One device that measures both relative humidity and air temperature
- Air Temperature Measuring Range: -20 °C to +60 °C (Accuracy ±2 °C)
- Relative Humidity Measuring Range: 0 - 100% RH (Accuracy ±5 RH)
- Operating Conditions: 0 ° to +50 °C, <80% RH
- Dimensions: 54w x 34l x 146H mm
- Weight 138g

Trotec BC20 - Thermohygrometer

Trotec BC20
I-TRO-BC20

- 2-in-1 device that measures relative humidity and air temperature
- Quick reaction time, Dew Point function, Min and Max value function/hold function
- Air Temperature Measuring Range: -30 °C to +100 °C (Accuracy ±1 °C)
- Relative Humidity Measuring Range: 0 - 100% RH (Accuracy ±2 RH)
- Dimensions: 34L x 45W x 255H mm
- Weight 200g

Trotec BM20 - Economic Wood Moisture Meter

Trotec BM20
I-TRO-BM20

- Dual scale for wood moisture and material moisture measuring
- Direct reading in %
- Wood moisture: Measurement range 1 - 45 % Accuracy ± 1 %
- Building moisture: Measurement range 0.2 - 2.4 % Accuracy ± 0.05 %

Trotec BM30 - Building Moisture Meter

Trotec BM30
I-TRO-BM30

- Quick and non-destructive indication of moisture spread in close-to-surface areas
- Extremely useful preliminary testing device for CM measurements
- Minimum and maximum value function / hold function

Trotec BP10 - Economic Infrared Pyrometer

Trotec BP10
I-TRO-BP10

- Non-contact surface temperature measurement from -30 °C to +270 °C
- Optical resolution of 6:1
- Clear backlit display for easy reading in poorly-lit environments
- Class II laser, Display resolution 0.1°C, Accuracy max: +/- 2%
- Includes: storage bag, 9V battery & user manual

Trotec BP20 - Infrared Pyrometer

Trotec BP20
I-TRO-BP20

- Temperature measurement range from -35°C to 800°C
- Optical resolution of 12:1
- Dual laser, Integrated alarm function
- Clear backlit display for easy reading in poorly-lit environments
- Can be used in continous mode for ongoing measurements
- Class II laser, Display resolution 0.1°C, Accuracy max: +/- 1% or +/- 1°C
- Includes: storage bag, 9V battery & user manual

TROTEC Measuing Tools - Professional Range

Trotec T510 Moisture Meter

Determines moisture content of:

- Wood
- Plaster board/gyprock
- Best in its class for measurement checks in forestry operations, sawmills & all wood processing works
- Choose from 100's of wood types
- Large LCD showing real time temperature and pre-defined temperature
- Made in Germany and comes with a Calibration certificate

Trotec T510
I-TRO-T510

Trotec T660 Sub Surface Moisture Me

- Determines moisture distributions up to 4cm away from surface
- Detects damp and dry wall floor areas
- Detects material moisture
- Moisture alarm
- Ideal for concrete slabs
- Made in Germany and comes with a Calibration certificate

Trotec T610
I-TRO-T610

Trotec T660
I-TRO-T660

Trotec T610 Sub Surface Moisture Meter

- Deep moisture measurements to a material depth of 30cm
- Detects damp & dry wall floor areas
- Moisture Alarm
- Ideal for concrete slabs
- Uses Microwave technology and is unaffected by salt and metal objects
- Made in Germany and comes with a Calibration certificate

Trotec T210
I-TRO-T210

Trotec T210 Thermohygrometer

- The T200 is a professional hand-held instrument for building climate checks in living spaces, offices, production areas and storage rooms.
- Perfect for AIR CONDITIONING applications & others
- Made in Germany and comes with a Calibration certificate

Trotec T260
I-TRO-T260

Trotec T260 Infrared Thermohygrometer

- The T250 combines thermohygrometer, laser pyrometer and dew point alarm in just the one unit.
- Made in Germany and comes with a Calibration certificate

Trotec TP6
I-TRO-TP6

Trotec TP6 Professional Infrared Thermometer

- Temperature measurement range from - 50°C to + 1,000°C
- Dual Laser, Integrate alarm function
- Clear backlit display
- Storage of upto 100 measuring spots
- Made in Germany and comes with a Calibration certificate

Trotec TP9
I-TRO-TP9

Trotec TP9 Professional Infrared Thermometer

- Temperature measurement range from - 50°C to + 1,600°C
- Dual Laser, Integrate alarm function
- Clear backlit display
- Storage of upto 100 measuring spots
- Combined infrared and contact sensor temperature measurements
- Battery Saving Power supply via USB port to your PC
- Made in Germany and comes with a Calibration certificate

Schonstedt XTpc Pipe & Cable Locator System

The schonstedt XTpc pipe and cable locator system is extremly versatile for it's portability. It can operate in three different active modes (clamp, conductive, or inductive), includes passive mode capability, and sonde mode with the addition of an optional sonde. Depth measurements are easily acquired at the push of a button up to approximately 6 metres. The XTPC is the best choice when:

- Locating is done infrequently and simplicity is a plus
- The excavation project is medium to small size
- Distances are relatively short (under 100 m)
- The environment is rural and less congested

Ask about the schonstedt tracemaster II for more challenging applications

The XTPC is made in two frequencies. In general, 82kHz is useful in tracing gas and water lines while 33kHz is a better choice for tracing electrical lines. The XTPC has a choice of sonde or passive cathodic mode.

Key Features

- Only complete locator system you can carry on your tool belt
- Industry's smallest Transmitter
- One hand operation
- Direction arrows for easy locating and foolproof centering
- Digital signal strength readout, plus variable frequency audio
- Single button depth calculation
- Manual or Automatic gain control
- Volume control, plus earphone jack
- Battery indicator on both receiver and transmitter
- Sonde mode
- Power line locating capability
- Transmitter includes a current meter and adjustable power levels

With the uniquely designed receiver, included holster, and a transmitter that can fit in your pocket, the Schonstedt XTpc pipe and cable locator can be carried on your tool belt. It features Schonstedt's innovative XT design with a retractable tip receiver, pistol grip handle, and easy one handed controls. The XTpc pipe and cable locator displays signal strength on an LCD display in addition to audio output, and can also passively locate power lines.

The included transmitter can operate for up to 8 hours on a built in rechargeable NiMH battery and has the maximum power output allowed by FCC regulations. The XTpc's transmitter features an LCD display for output level, output current, operating mode, and battery life. The built in battery can be charged with either a 12V DC or 240 VAC power source using the included chargers. It also has adjustable power levels, and a single "smart" connector for various clamps, clips, and antenna's.

3 year warranty

See next page for Pricing...

Receiver Specifications

Operating Frequency:	82kHz or 33kHz
Battery:	9 V Alkaline single battery
Battery Life:	18 hours intermittent use
Audio Output:	10 - 3000 Hz determined by signal strength 0 - 70 db SPL (Sound Pressure Level), Volume controllable
Weight (incl. batteries):	Under 2.8 lbs
Operating Temp:	(-20°C to 70°C)
Overal Dimensions:	
Closed:	44 cm x 7.6 cm x 21.5 cm
Extended:	70 cm x 7.6 cm x 21.5 cm
Max. Depth Capability:	Approximately 5.8 m

Schonstedt XTPC-33
I-SCH-XTPC33

Schonstedt XTPC-82
I-SCH-XTPC82

Transmitter Specifications

Operating Frequency:	82kHz or 33kHz
Output Power:	1.8 W max on 75 ohm load (conductive mode)
Battery Type:	Rechargeable NiMH pack (7.2 V)
Battery Life:	8 hours intermittent operation
Charging:	Smart charger powered by AC supply or vehicle supply
Outputs/Inputs:	Circular "smart" connector to: 1) Inductive antenna 2) Inductive clamp 3) Conductive clips 4) Battery charger
Weight (incl. batteries):	Under 680 grams
Operating Temp:	-20°C to 70°C

Standard Package includes

- Receiver & Transmitter
- Holster
- Conductive Clip Assembly which includes Standard Conductive Clips
- Soft Carrying Case
- Ground Stake
- Auto Adapter for Transmitter
- Main Charging System (Converter, Power Supply & Cord) for Transmitter

XTPC Accessories

I-SCH-XTPC20010	**Inductive Antenna** *(Specify Frequency)*	A-SCH-XT-PC20010
I-SCH-XTPC60000	**3" Inductive Signal Clamp**	A-SCH-XT-PC60000
I-SCH-XTPC60001	**5" Inductive Signal Clamp**	A-SCH-XT-PC60001
I-SCH-XTPC60002	**7" Inductive Signal Clamp**	A-SCH-XT-PC60002
I-SCH-TM33KHZT	**Standard Sonde** *33Hz*	A-SCH-TM-33KHZT
I-SCH-TM82KHZT	**Standard Sonde** *82Hz*	A-SCH-TM-82KHZT

Bear 26x Magnification Construction Automatic Level

- Accuracy 2.0mm/1km
- Setting accuracy ± 0.5"
- Objective lens 40mm diameter
- Calibrated scope site
- Magnetic dampened compensator ± 15"
- Left & right & slow motion screws
- 360° circle (1° graduations)
- Sealed carry case against the rain and dust
- Compensator lock button for transport in case
- Fits flat or domed head tripods
- Yellow housing
- Horizontal bubble 8' per 2mm
- Stadia ratio 1:100

5 year warranty

Bear 26x Level
I-B-B26X

Bear 32x Magnification Professional Automatic Level

- Accuracy 1.5mm/1km
- Setting accuracy ± 0.4"
- Objective lens 40mm diameter
- Left & right & slow motion screws
- Magnetic dampened compensator ± 15"
- Compensator lock button for transport in case
- Stadia ratio 1:100
- 360° circle (1° graduations)
- Sealed carry case against the rain and dust
- Fits flat or domed head tripods
- Sokkia type green housing
- Horizontal bubble 8' per 2mm
- Calibrated scope site

5 year warranty

Bear 32x Level
I-B-B32X

Bear 20x Magnification Builder's Level

- Horizontal circle with vernier
- Ideal for basic preparation of job sites
- 20 X magnification
- 22mm objective lens
- Staid ration 1:100
- Minimum focus: 1.5m
- 3 foot screw leveling
- Heavy duty construction
- Brass horizontal slow motion screw & clamp
- Includes plumb bob and foam padded heavy duty carry case
- 5/8 x 11 Base

1 year warranty

Builders 20x Level
I-B-BL

CST/berger 20x Magnification Transit Level

- Working Range: 60m+
- Brass Levelling Screws
- High Precision Level Vial
- Vertical Angle 1° Degrees
- 20x Magnification
- Horizontal Circle 15"
- Telescope ± 45° Plunge
- Built-in Sun Shade

1 year warranty

20x Transit Level
I-C-TL20

Ideal for:

- Fence & grape lines
- Measuring horizontal & vertical angles
- Normal leveling
- Alignment of pipe laying trenches

Accessories

Wood Flat Tripod
A-B-HD-W

Aluminium Tripod
A-B-HD-D

Aluminium 5M Staff
A-B-5M-E

7.6 Metre Fibreglass
A-S-98013

Nikon AC-2S 24x Automatic Level

The AC-2s auto level is easy to set up can attach to both flat-head and spherical-head tripods. Horizontal tangent knobs with an unlimited range ensure smooth, precise pointing and angular measurement, and you can operate them with either hand.

- *Compact and lightweight*
- *Water-resistant construction*
- *Magnetic-dampened automatic compensator*
- *Horizontal tangent knobs with unlimited range*
- *Smooth, precise pointing and angular measurement*
- *Detachable eyepiece lens*

2 year warranty

Nikon AC-2S
I-NK-AC-2S

Nikon AP-8 28x Automatic Level

The AP-8 auto level is easy to set up can attach to both flat-head and spherical-head tripods. Horizontal tangent knobs with an unlimited range ensure smooth, precise pointing and angular measurement, and you can operate them with either hand.

- *Compact and lightweight*
- *Water-resistant construction*
- *Magnetic-dampened automatic compensator*
- *Horizontal tangent knobs with unlimited range*
- *Smooth, precise pointing and angular measurement*
- *Detachable eyepiece lens*

2 year warranty

Nikon AP-8
I-NK-AP-8

Nikon AE-7 30x Engineering Auto Level Made in Japan

Nikon AS/AE Series auto levels feature waterproof, nitrogen-filled, high-power telescopes that help you make precise measurements even in the wettest conditions. They feature a unique automatic air-dampened compensator to prevent magnetic interference, and an endless horizontal fine drive to ensure smooth, precise pointing and angular measurement. AS/AE "C" Series auto levels have an inbuilt angular cirlce reading. A mirror with a pentaprism lets you view the circular bubble as an erect image during setup and sighting.

- *Air-dampened automatic compensator*
- *Standard deviation w/o micrometer: ±1 mm*
- *Standard deviation w/micrometer: ±0.45 mm*

2 year warranty

Nikon AE-7
I-NK-AE-7

Nikon AE-7C
I-NK-AE-7C

Nikon AS-2 34x Engineering Auto Level Made in Japan

Nikon AS Series auto levels feature waterproof, nitrogen-filled, high-power telescopes that help you make precise measurements even in the wettest conditions They feature a unique automatic air-dampened compensator to prevent magnetic interference, and an endless horizontal fine drive to ensure smooth, precise pointing and angular measurement AS/AE "C" Series auto levels have an inbuilt angular cirlce reading.

- *Air-dampened automatic compensator*
- *Standard deviation w/o micrometer: ±0.8 mm*
- *Standard deviation w/micrometer: ±0.4 mm*

2 year warranty

Nikon AS-2
I-NK-AS2

Nikon AS-2C
I-NK-AS2-C

Accessories

Wood Flat Tripod
A-B-HD-W

Aluminium 5M Staff
A-B-5M-E

T5C Electronic Theodolite

- *NEW* **Vertically Compensated**
- A 5" Instrument with Brilliant Optics
- Perfect partner for field applications in a myriad of industries including construction, earthmoving, surveying, pipe laying and building
- Over 80hrs of use on a single alkaline pack
- User friendly controls with a large clear LCD screen and double sided displays
- Efficient power saving operation
- Incremental angle measurement
- Auto Shut off
- 3x Optical Plummet

Specifications

Accuracy:	5"
Minimum Reading:	1"
Magnification:	30 x
Display Panel:	Both Sides
Illumation:	Yes
Batteries:	(1) NiMH & (1) Alkaline Battery
Operating Time:	45hrs NiMh, 80hrs Alkaline
Objective Lens:	40mm
Field of View:	1° 20'
Plate Level:	30"/2mm
Circular Level:	8'
Weight:	4.3kgs

Includes

2 x battery packs, foam padded heavy duty carry case, manual, charger, rain cover and tools

2 year warranty

Optional T5 Diagonal Eye piece

- Suits the Bear T5 Theodolite and RTS5 Total Station
- Allows 90 degree vertical operation on both units

Bear Theodolite
I-B-T5C

Plummet Adaptor
A-B-RGTLENS

Seco Fibreglass Tripod
A-S-5203-10

Bear Wood Tripod
A-B-HD-W

Aluminium Tripod
A-B-HD-F

7.6 Metre Fibreglass
A-S-98013

5 Metre Fibreglass
A-S-92046

Aluminium 5M Staff
A-B-5M-E

Non Rechargable	
9 Volt Dry Cell	
AAA Alkaline	
AA Alkaline 2-Pack	
C Cell Alkaline	
D Cell Alkaline	
NiMH Rechargable	
AA 1600mAH	
AA 2700mAH	
C Cell 5000mAH	
D Cell 9000mAH	